Monoclonal Antibodies





Gentaur Molecular Products Voortstraat 49 1910 Kampenhout, BELGIUM

Tel 0032 16 58 90 45 | Fax 0032 16 50 90 45 www.gentaur-worldwide.com info@gentaur.com

TABLE OF CONTENTS

Table of contents	2
Introduction	3-4
Conditioning and storage of monoclonal antibodies	5-5
The nomenclature of the rat immunoglobulin isotypes	6-6
Techniques of ELISA, ELISPOT and immunohistolocalisations	7-10
Rat monoclonal antibodies anti-mouse Immunoglobulins	11-54
Mouse monoclonal antibodies anti-rat Immunoglobulins	55-91
Normal rat serum - Ig titrated	92-92
LOU rat immunocytoma (plasmacytoma) immunoglobulins	93-93
Rat monoclonal antibodies anti-human Immunoglobulins	94-109
Rat monoclonal antibodies anti-human Interleukins	110-116
Rat monoclonal antibodies anti-human Leucocytes	117-126
Rat monoclonal antibodies anti-human Immunodeficiency Virus	127-129
Rat monoclonal antibodies anti-rabbit Immunoglobulins G	130-131
Rat monoclonal antibodies anti-bovine γ -globulins	132-134
Rat monoclonal antibodies anti-Horse Radish Peroxidase	135-137
Rat monoclonal antibodies anti-Fluorescein	138-139
Rat monoclonal antibodies anti-Dinitrophenyl Hapten (used as control MoAb to rat MoAb)	140-155
Mouse monoclonal antibodies anti-Dinitrophenyl Hapten	156-156

Some Words on Rat Monoclonal Hybridomas

The first model of monoclonal antibody (MAb) secreting hybridomas developed by Köhler and Milstein¹, was the mouse model. It can almost be considered perfect. Its efficiency and extreme stability probably account for its success. However, there are several reasons for developing another rodent model, particularly a rat model.

The first reason is certainly linked to the rat antibody repertoire which is different from that of the mouse. This is true for the mouse xenoantigens which can be studied with rat but not with mouse MAbs. Likewise, rat alloantigens can be better studied with rat than with mouse MAbs. At last, some antigens from origins other than mouse or rat species can induce much stronger immune responses in rats than in mice and evidently the reciprocal could be true for other antigens.

The second reason relates to physicochemical and biological properties of rat immunoglobulins which do not seem to exist in the mouse species. Rat antibodies of the IgG1, IgG2a, and IgG2b isotypes can easily fix the human or the rabbit complement. Likewise, the rat IgG2b antibodies can be efficiently used by human K cells to kill their target cells.

The third reason is linked to the *in vivo* production of rat MAbs. Rats are approximately ten times bigger than mice. A LOU/C rat could give a mean production of 50 to 150 mg of MAbs per animal. Although the future of the production of MAbs lies in *in vitro* culture, at the present time, MAbs *in vivo* production is less animal cosuming in rats than in mice.

The fourth reason concerns the purification methods which have been set up for rat MAbs; they are easy and rapid to use, highly efficient, and inexpensive. An *in vitro* culture supernatant² and an *in vivo* ascitic fluid method³ have been developed for purification of rat MAbs by immunoaffinity chromatography. However, conventional purification techniques of rat immunoglobulins can also be used, but these techniques are based on properties of heterogenous molecule populations which are rarely found in a given MAb preparation. Techniques of DEAE chromatography, gel filtration, or preparative electrophoresis can be used, but the degree of purity and the percentage of recovery achieved by them are limited. In most cases, affinity chromatography is preferable.

The fith reason is the absence of viral particles in rat hybridomas and therefore in rat MAbs; this is an important fact to take into account in the case of human *in vivo* therapeutic use.

However, obtaining rat-rat hybridomas still seems to be considered difficult. In sentences like, "At the time of writing, successful production of rat-rat hybridomas have been limited to a small number of laboratories. Several experienced investigators have had difficulty in keeping rat-rat hybrids alive for more than 2 to 3 weeks⁴, the same author in the second edition of his book⁵ adds to the same paragraph, "The reason for such problems is not yet clear. The hybrids seem to grow initially, and then die. Perhaps rat cells are unduly susceptible to 'natural killer' cells, or some rat colonies have unusually high number of natural killer cells in the spleen". Similar sentences are frequently written or heard in conferences and seminars. Already we have obtained, and so have scientists around us, thousands and thousands of rat-rat hybridomas with no more difficulty than if we are making mouse-mouse hybridomas. We do not believe that we are especially clever, but rather we believe it is just a question of experiments which can be communicated to interested colleagues.

Moreover, many scientists are not familiar with rat immunoglobulins and rat MAbs. There are no books and no reviews devoted either to the development of rat hybridomas or to the use of rat MAbs. The purpose of *"Rat Hybridomas and Rat Monoclonal antibodies" H. BAZIN (Ed.) CRC Press, Boca Raton, Florida, 1990, 515 pages* is to fill this gap. However, it should be made clear that we have not tried by any means to write an exhaustive review on hybridomas in general as many excellent books have already been written on this subject, although they generally concern mouse⁴⁻⁷ or human hybridomas^{8,9} which are now too numerous to all be described or on rat hybridomas. We have attempted rather to write on our own experiments or on those of friend laboratories which have used similar techniques against many different kinds of antigens.

We hope that this book will further the development of the use of the rat hybridomas and the rat monoclonal antibodies.

REFERENCES

- Köhler G. and Milstein C. Continuous cultures of fused cells secreting antibody of predefined specificity. Nature, 256: 495, 1975.
- Bazin H., Xhurdebise L.M., Burtonboy G., Lebacq A.M., De Clercq L., and Cormont F. Rat monoclonal antibodies.I.Rapid purification from *in vitro* culture supernatants. J. Immunol. Methods, 66: 261, 1984.
- 3. Bazin H., Cormont F., and De Clercq L. Rat monoclonal antibodies.II. Rapid and efficient method of purification from ascitic fluid or serum. J. Immunol. Methods, 71, 9: 1984.
- 4. Goding J.W. Monoclonal Antibodies: Principle and Practice, 1st ed., Academic Press, London, 1983, 276.
- Goding J.W. Monoclonal Antibodies: Principle and Practice, 2nd ed., Academic Press, London, 1986, 315.
- Hurrell J.G.R. Monoclonal Hybridoma Antibodies: Techniques and Applications, CRC Press, Boca Raton, FL, 1985, 240.
- 7. Bartal H., and Hirshaut Y. Methods of Hybridoma Formation. Humana Press, Clifton, NJ, 1987.
- Engleman E.G., Foung S.K.H., Larrick J., and Raubitschek A. Human Hybridomas and Monoclonal Antibodies. Plenum Press, New York, 1985.
- Strelkauskas A.J. Human Hybridomas Diagnosis and Therapeutic Applications, Marcel Dekker, Inc., New York, 1987.

Monoclonal antibodies from IMEX

Sconditioning and storage

Vials

1 or 5 or 10 or more ml.

Concentration

1 mg/ml or other concentrations upon request.

Purified products

They are in PBS buffer + $NaN_3 0.1\%$ Some purified LO-CD (in order to be used in cell cultures) can be in PBS buffer without NaN_3 upon request.

Labelled products

- With Biotin and with FITC: are in PBS buffer + 0.1% NaN₃ and glycerol 50%
- With Peroxidase : are in PBS buffer + glycerol 50%

Ascitic fluid

Preservative reagents:

- PMSF (phenyl methane sulfonyl fluorid): 20 μ l/ml of ascite from a solution at 40 mg/ml in ethanol.
- Thimerosal: 10 μ l/ml of ascitic fluid from a solution at 1g/l of distilled water.

Storage of the products:

They must be stored at -20°C.

Quality control and validity

All our mAbs are tested for their specific activity and are guaranteed for 18 months

Our data sheets mention:

- the date of testing
- the duration of stability: at least 18 months

The nomenclature of the Rat Immunoglobulin Isotypes has been first described in:

Bazin H., Beckers A., Querinjean P. Three classes and four (sub)classes of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. European Journal of Immunology, 1974, **4**: 44-48.

Bazin H., Beckers A., Urbain-Vansanten G., Pauwels R., Bruyns C., Tilkin A.F., Platteau B., Urbain J. Transplantable IgD immunoglobulin-secreting tumours in rats. Journal of Immunology, 1978, **121** : 2077-2082.

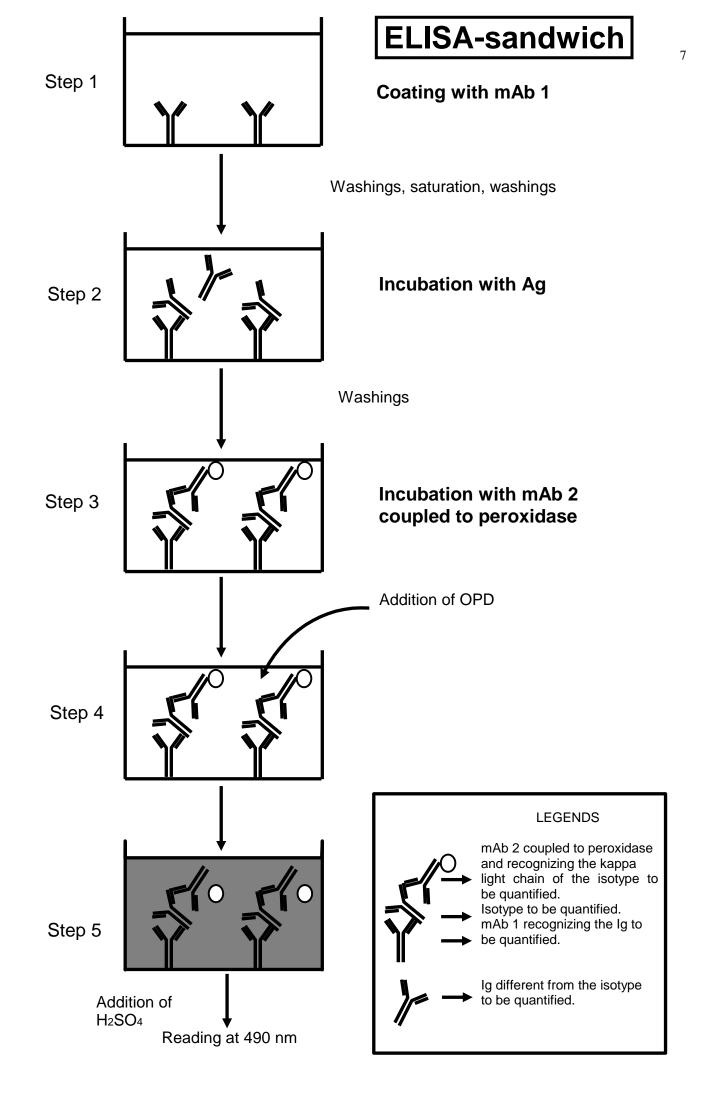
The ICDB numbers correspond to the numbers attributed by the Immunoclone Database Bank to "Hybridoma-monoclonal antibody".

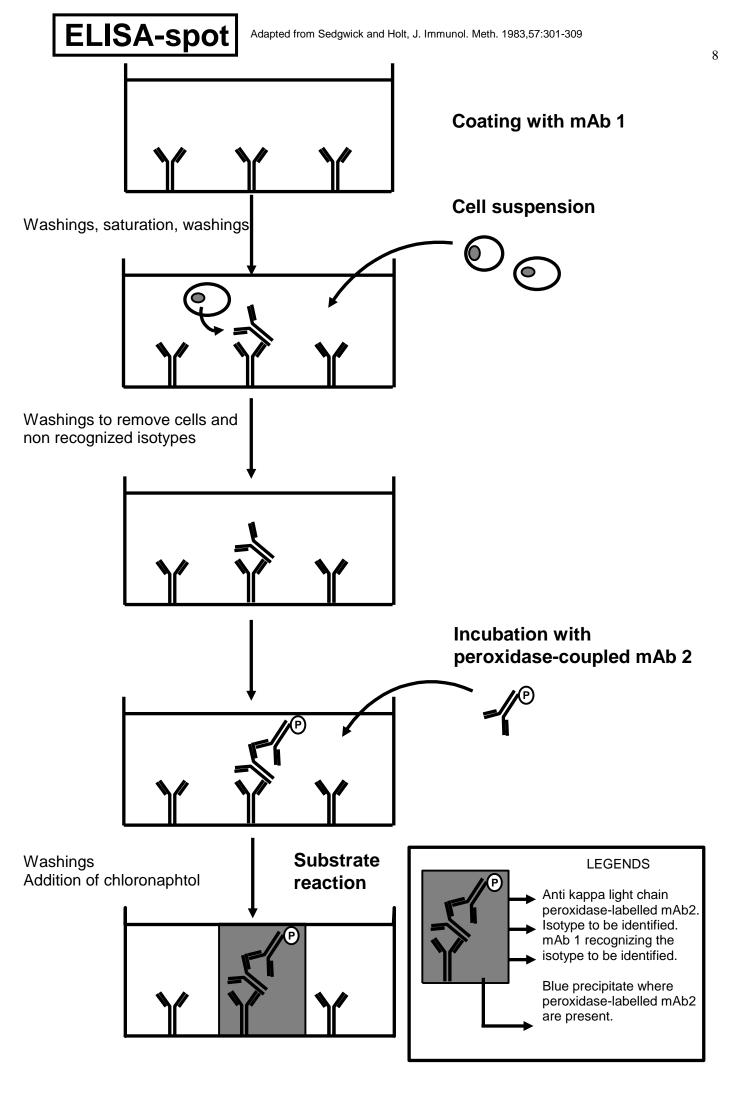
For further information, please contact :

For the USA	ATCC
	Parklawn Drive
	Rockville
	Maryland 20852

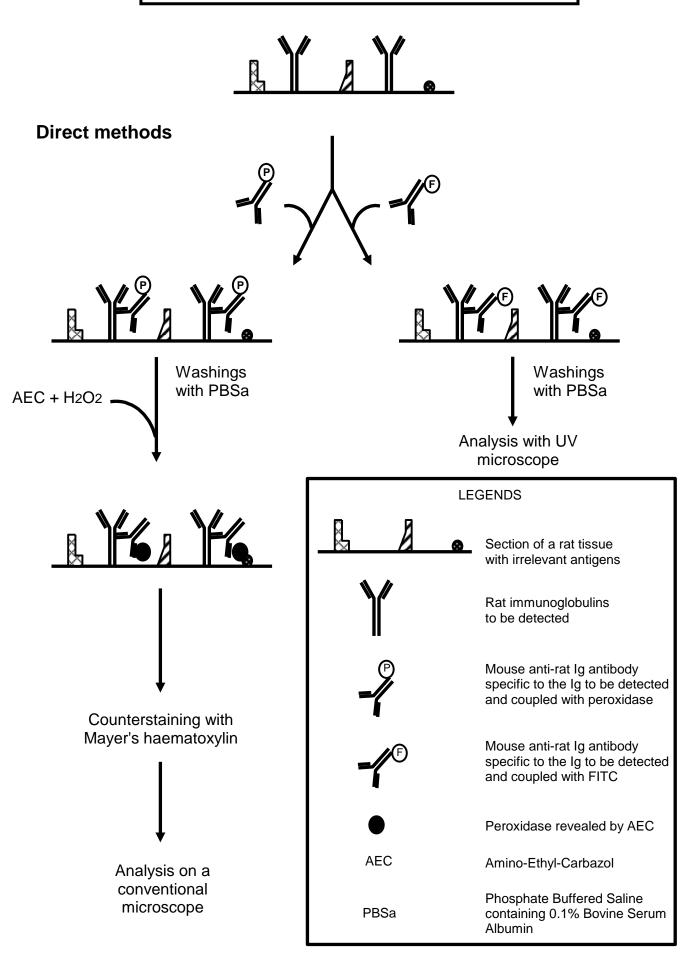
For Europe CERDIC 2229 Route des Crêtes Sophia - Antioplis F - 06560 Valbonne Tel : (33)92942288

For Japan Institute for Physical and Chemical Research Wako, Saitama 351-01 Riken - Tokyo Tel : 0484 (62) 1111

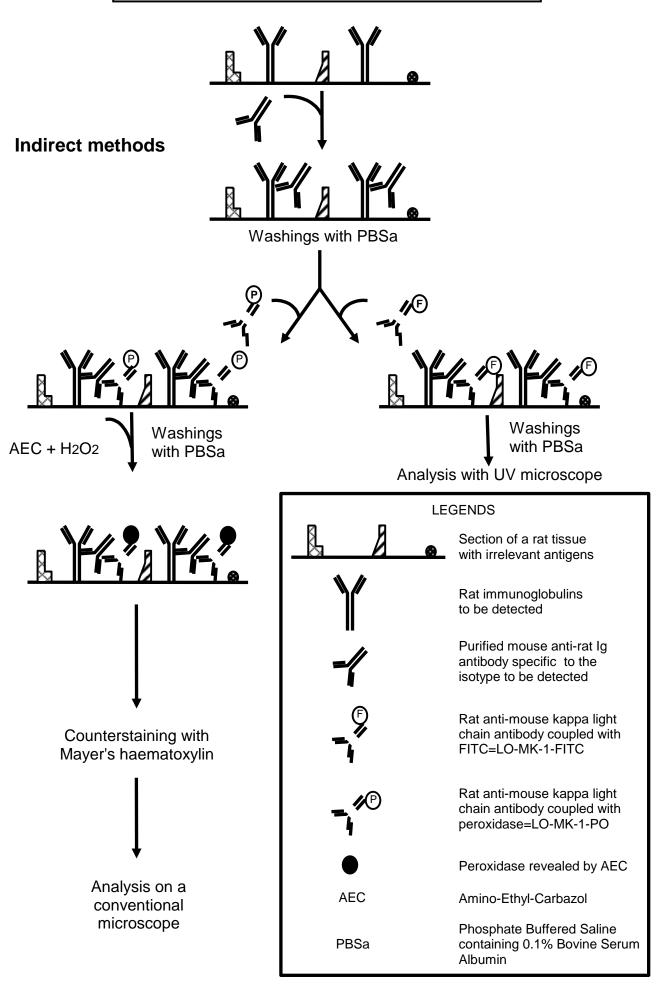




Immunohistolocalisation (1)



Immunohistolocalisation (2)



I. RAT MONOCLONAL ANTIBODIES ANTI-MOUSE IMMUNOGLOBULINS

CODE FOR RAT MAb ANTI-MOUSE IMMUNOGLOBULIN :

<u>LO-M"..."-"..."</u> : <u>LO</u>uvain rat <u>-</u> anti-<u>M</u>ouse Ig "<u>...</u>" <u>-</u> : number "<u>...</u>"

LO-MK-1	LO-MG1-2
LO-MK-2	LO-MG1-13
LO-MK-3	LO-MG1-15
LO-MM-3	LO-MG2a-2
LO-MM-8	LO-MG2a-3
LO-MM-9	LO-MG2a-7
LO-MA-7	LO-MG2a-9
LO-MA-10	LO-MG2b-1
LO-MD-6	LO-MG2b-2
LO-MD-8	LO-MG3-7
LO-ME-2	LO-MG3-13
LO-ME-3	LO-MG-COC-2

II. RAT CONTROL IMMUNOGLOBULINS:	
- Rat MoAb anti-DNP	p.138
- Rat monoclonal (myeloma) immunoglobulins	p.93

III. MOUSE CONTROL IMMUNOGLOBULINS: - Mouse MoAb anti-DNP p.156

MOUSE IMMUNOGLOBULINS¹

(Sub)classes	IgM	IgD	IgG1	IgG2a	IgG2b	IgG3	IgE	IgA
Heavy chains	mu	delta	gamma1	gamma2a	gamma2b	gamma3	epsilon	alpha
Light chains		Approximately 95% of kappa - 5% of lambda						
Molecular weight (KD)	900	180	160			190	170-500	
Serum concentrations (per ml)	0.1-1.0 mg	1-10 µg	1-3 mg	1-10 mg	1-5 mg	0.1-0.2 mg	0.1-1 μg	1-3 mg
Serum half-life (days)	0.5	-	8-11	6-12	3-3.5	4	0.5	0.5

¹<u>References</u>: Bazin and Malet, Immunology 1969, 17: 345; Bazin and Duplan, Rev. Fr. & Clin. Biol. 1966, 11: 987; Ey et al., Immunochemistry 1978, 15: 429; Fahey et al., J. Exp. Med. 1964, 120: 223; Fahey and Sell, J. Exp. Med. 1965, 122: 41; Grey et al., J. Exp. Med. 1971, 133: 289; Hirano et al., Int. Arch. Allergy 1983, 71: 182; Potter, Phys. Rev. 1972, 52: 631.

RAT MONOCLONAL ANTIBODIES ANTI-MOUSE IMMUNOGLOBULIN

ANTI-LIGHT CHAIN

MAb	Species of the MAb	Specificity mouse	Avid	ity*	Recommend	ed applications
	and isotype	immunoglobulin	tested on	(M -1)	Immunoassay**	Immunopurification
LO-MK-1	rat IgG2a kappa	kappa light chain	IgM	ND	yes	No
			IgG1	ND		
			IgG2a	3x10 ⁹		(all isotypes)
			IgG2b	ND		
			IgG3	ND		
LO-MK-2	rat IgG1 kappa	kappa light chain	IgM	2x10 ⁸	yes	yes
			IgG1	1x10 ⁹		
			IgG2a	3x10 ⁹		(all isotypes)
			IgG2b	2x10 ⁹		
			IgG3	2x10 ⁹		
LO-MK-3	rat IgM kappa	kappa light chain	IgM	ND	yes	no
			IgG1	ND		
			IgG2a	1x10 ⁷		(all isotypes)
			IgG2b	ND		
			IgG3	ND		

*See technical data sheet for more details.

**See technical data sheet for labelling properties. ND: not determined.

RAT MONOCLONAL ANTIBODIES ANTI-MOUSE IMMUNOGLOBULIN

ANTI-HEAVY CHAIN

MAb	MAb Species of the MAb Specificity mouse		Avidity*	Recommend	ed applications
	and isotype	immunoglobulin	(M ⁻¹)	Immunoassay**	Immunopurification
LO-MM-3	rat IgM kappa	mu heavy chain	2 x 10 ⁸	yes	yes
LO-MM-8	rat IgG1 kappa	mu heavy chain	3.6 x 10 ⁹	yes	ND
LO-MM-9	rat IgG2a kappa	mu heavy chain	7 x 10 ⁸	yes	yes
LO-MA-7	rat IgM kappa	alpha heavy chain	4.8 x 10 ⁹	yes	yes
LO-MA-10	rat IgM kappa	alpha heavy chain	2.9 x 10 ⁹	yes	no
LO-MD-6	rat IgG2a kappa	delta heavy chain	1.2 x 10 ⁹	yes	yes
LO-MD-8	rat IgG1 kappa	delta heavy chain	2.9 x 10 ⁹	yes	ND
LO-ME-2	rat IgG2a kappa	epsilon heavy chain	2 x 10 ⁹	yes	yes
LO-ME-3	rat IgG1 kappa	epsilon heavy chain	3 x 10 ⁹	yes	ND
LO-MG1-2	rat IgG1 kappa	gamma 1 heavy chain	9 x 10 ⁸	yes	yes
LO-MG1-13	rat IgG1 kappa	gamma 1 heavy chain	5.1 x 10 ⁹	yes	ND
LO-MG1-15	rat IgG1 kappa	gamma 1 heavy chain	2.8 x 10 ⁹	yes	ND
LO-MG2a-2	rat IgG2a kappa	gamma 2a heavy chain	7 x 10 ⁹	yes	yes
LO-MG2a-3	rat IgG2a kappa	gamma 2a heavy chain	3 x 10 ⁹	yes	yes
LO-MG2a-7	rat IgG1 kappa	gamma 2a heavy chain	5.1 x 10 ⁹	yes	ND
LO-MG2a-9	rat IgG1 kappa	gamma 2a heavy chain	2.5×10^9	yes	ND
LO-MG2b-1	rat IgG1 lambda	gamma 2b heavy chain	3 x 10 ⁸	yes	yes
LO-MG2b-2	rat IgG1 kappa	gamma 2b heavy chain	1 x 10 ¹⁰	yes	yes
LO-MG3-7	rat IgM kappa	gamma 3 heavy chain	2 x 10 ¹⁰	yes	no
LO-MG3-13	rat IgG1 kappa	gamma 3 heavy chain	6.8 x 10 ⁹	yes	yes

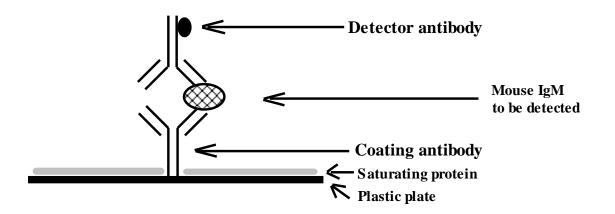
*See technical data sheet for more details.**See technical data sheet for labelling properties. ND: not determined.

AVIDITY (1) OF RAT MONOCLONAL ANTIBODIES ANTI-MOUSE IMMUNOGLOBULIN (M⁻¹)

Tested on isotypes proteins	IgM PB1 (2)	IgA ABPC-105	IgG1 polyclonal (3)	IgG2a MOPC-173(4)	IgG2b 307-E9 (2)	IgG3 C8302C11 (2)	IgE LB-4 (2,5)	IgD TEPC1017 TEPC1033 (6)
LO-MK-1	0			3 x 109	0			
LO-MK-2	2×10^8		1 x 10 ⁹	3 x 10 ⁹	2 x 10 ⁹	2 x 10 ⁹		
LO-MK3				1 x 10 ⁷				
LO-MM-3	2×108							
LO-MM-8	3.6×10^9							
LO-MM-9	2×10^8							
LO-MA-7		4.8 x 109						
LO-MA-10		2.9 x 10 ⁹						
LO-MD-6								1.2 x 10 ⁹
LO-MD-8								2.9 x 10 ⁹
LO-ME-2							2 x 109	
LO-ME-3							3 x 10 ⁹	
LO-MG1-2			9 x 108					
LO-MG1-13			5.1 x 10 ⁹					
LO-MG1-15			2.8 x 10 ⁹					
LO-MG2a-2				7×10^9				
LO-MG2a-3				3×10^9				
LO-MG2a-7				5.1×10^9				
LO-MG2a-9				2.5×10^9				
LO-MG2b-1					3 x 108			
LO-MG2b-2					1 x 10 ¹⁰			
LO-MG3-7						2 x 1010		
LO-MG3-13						6.8 x 10 ⁹		

As determined by the techniques of (1) Van Heymingen et al. J. Immunol. Methods 1983, 62: 147;(2) kindly given by Dr J. Van Snick;(3) Purified as described in Bazin and Malet, Immunology 1969, 17: 345;(4) Potter, Physiol.Rev. 1972, 52: 631;(5) ATCC 141;(6) Finkelman et al., J. Immunol. 1981, 126: 680.

DETECTION AND QUANTIFICATION OF MOUSE IgM by ELISA



	Sandwich ELISA assays					
	Option 1	Option 1 Option 2 Option 3 Option 4				
Detector antibodies	LO-MM-9	LO-MM-8	LO-MM-8	LO-MK-1*		
Capture antibodies	LO-MM-3 LO-MM-3 LO-MM-9 LO-MM-3					
Standard	MADNP-5					

Option 1 is recommended

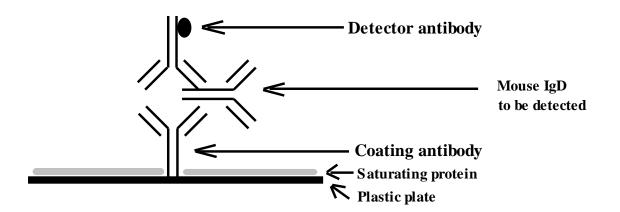
Assay conditions

- Coated antibody: LO-MM-3 at 5 µg/ml (in a carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: 5% lyophilized skimmed milk or some other proteins
- Detector antibody:LO-MM-9 conjugated to biotin and then streptavidin-peroxidase (or any other detection system) or LO-MM-8 conjugated to peroxidase
- Normal range of detectable mouse IgM concentrations in this assay: 2→0.1 µg/ml

^{*&}lt;u>Remark</u>: Only kappa mouse IgM molecules are detected. In normal serum, mouse Ig molecules bearing kappa light chain represent about 95% of the total.

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

DETECTION AND QUANTIFICATION OF MOUSE IgD by ELISA



	Sandwich ELISA assays			
	Option 1 Option 2			
Detector antibodies	LO-MD-8	LO-MK-1*		
Capture antibodies	LO-MD-6	LO-MD-6		

Option 1 is recommended

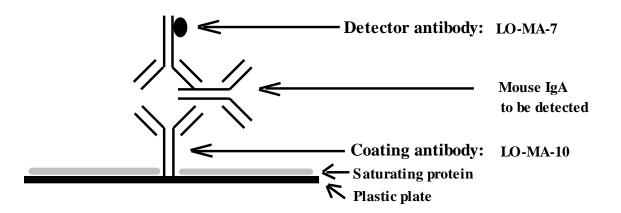
Assay conditions

- Coated antibody: LO-MD-6 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: LO-MD-8 conjugated to biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable mouse IgD concentrations in this assay:2->0.1 µg/ml

^{*&}lt;u>Remark</u>: Only kappa mouse IgD molecules are detected. In normal serum, mouse Ig molecules bearing kappa light chain represent about 95% of the total.

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

DETECTION AND QUANTIFICATION OF MOUSE IgA by Elisa



	Sandwich ELISA assays				
	Option 1 Option 2				
Detector antibodies	LO-MA-7 LO-MK-1*				
Capture antibodies	LO-MA-10 LO-MA-10				
Standards	Upon request				

Option 1 is recommended

Assay conditions

- Coated antibody: LO-MA-10 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: LO-MA-7 conjugated to biotin and then

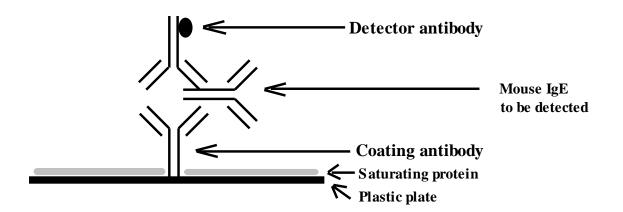
streptavidin-peroxidase(or any other detection system)

- Normal range of detectable mouse IgA concentrations in this assay:2->0.1 µg/ml

^{*&}lt;u>Remark</u>: Only kappa mouse IgA molecules are detected. In normal serum, mouse Ig molecules bearing kappa light chain represent about 95% of the total.

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

DETECTION AND QUANTIFICATION OF MOUSE IgE by ELISA



	Sandwich ELISA assays			
_	Option 1 Option 2			
Detector antibodies	LO-ME-2	LO-MK-1*		
Capture antibodies	LO-ME-3	LO-ME-3		

Option 1 is recommended

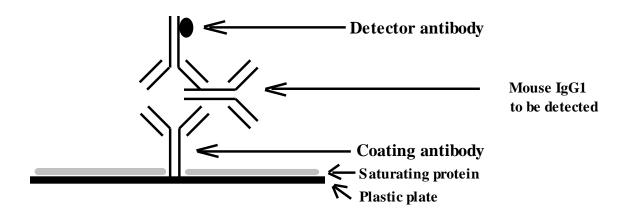
Assay conditions

- Coated antibody: LO-ME-3 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: LO-ME-2 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable mouse IgE concentrations in this assay: $2 \rightarrow 0.1 \ \mu g/ml$

^{*&}lt;u>Remark</u>: Only kappa mouse IgE molecules are detected. In normal serum, mouse Ig molecules bearing kappa light chain represent about 95% of the total.

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

DETECTION AND QUANTIFICATION OF $MOUSE \ IgG1$ by elisa



	Option 1	Option 2
Detector antibodies	LO-MG1-2	LO-MK-1*
Capture antibodies	LO-MG1-13	LO-MG1-13
Standard	MADNP-1	

Option 1 is recommended

Assay conditions

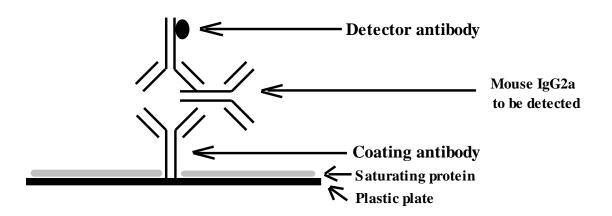
- Coated antibody: LO-MG1-13 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: LO-MG1-2 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)

- Normal range of detectable mouse IgG1 concentrations in this assay:2→0.1 µg/ml

^{*&}lt;u>Remark</u>: Only kappa mouse IgG1 molecules are detected. In normal serum, mouse Ig molecules bearing kappa light chain represent about 95% of the total.

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

DETECTION AND QUANTIFICATION OF $MOUSE \ IgG2a$ by elisa



	Sandwich ELISA assays			
	Option 1	Option 2	Option 3	Option 4
Detector antibodies	LO-MG2a-3	LO-MG2a-2	LO-MG2a-7	LO-MK-1*
Capture antibodies	LO-MG2a-7	LO-MG2a-7	LO-MG2a-9	LO-MG2a-9
Standard	MADNP-2			

Option 1 is recommended

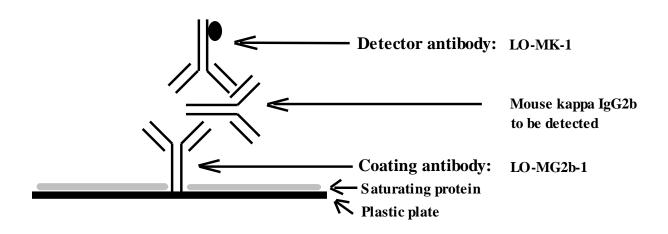
Assay conditions

- Coated antibody: LO-MG2a-7and LO-MG2a-9 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: LO-MG2a-2 or LO-MG2a-3 or LO-MG2a-7 conjugated to peroxidase or biotin and then streptavidin-peroxidase (or any other detection system)
- Normal range of detectable mouse IgG2a concentrations in this assay:2→0.1 µg/ml

^{*&}lt;u>Remark</u>: Only kappa mouse IgG2a molecules are detected. In normal serum, mouse Ig molecules bearing kappa light chain represent about 95% of the total.

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

DETECTION AND QUANTIFICATION OF $MOUSE \ IgG2b$ by elisa



- LO-MG2b-1 and LO-MK-1 can be used in Sandwich ELISA.
- LO-MG2b-1 coats on plastic plate.
- Standard: MADNP-3

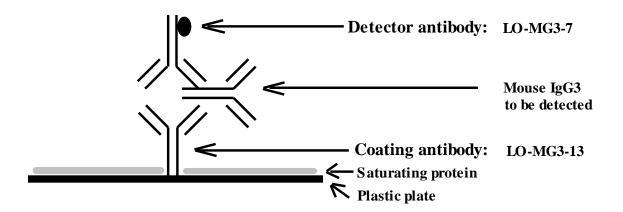
Assay conditions

- Coated antibody: LO-MG2b-1 at 10 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: LO-MK-1 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable mouse IgG2b concentrations in this assay:2→0.1µg/ml

<u>Remark</u>: Only kappa mouse IgG2b molecules are detected. In normal serum, mouse Ig molecules bearing kappa light chain represent about 95% of the total.

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

DETECTION AND QUANTIFICATION OF $MOUSE \ IgG3$ by elisa



	Option 1	Option 2	
Detector antibodies	LO-MG3-7	LO-MK-1*	
Capture antibodies	LO-MG3-13	LO-MG3-13	
Standard	MADNP-4		

Option 1 is recommended

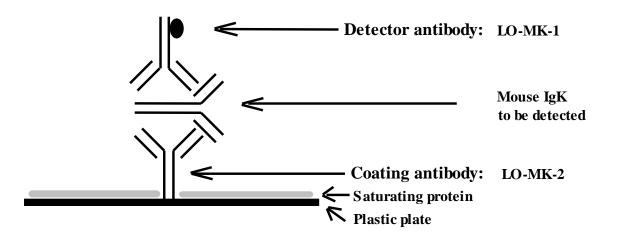
Assay conditions

- Coated antibody: LO-MG3-13 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: LO-MG3-7 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable mouse IgG3 concentrations in this assay:2→0.1 µg/ml

<u>Remark</u>: Only kappa mouse IgG3 molecules are detected. In normal serum, mouse Ig molecules bearing kappa light chain represent about 95% of the total.

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

DETECTION AND QUANTIFICATION OF MOUSE IgK by Elisa



- LO-MK-1 and LO-MK-2 do not bind to the same epitope(s) of mouse IgK.
- LO-MK-2 coats very well on plastic plate.
- Standards: upon request

Assay conditions

- Coated antibody: LO-MK-2 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: LO-MK-1 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable mouse IgK concentrations in this assay:2->0.6 µg/ml

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

TECHNIQUE OF PURIFICATION OF MOUSE Ig BY IMMUNOAFFINITY CHROMATOGRAPHY

"x" ml of serum or ascitic fluid from BALB/c mice bearing or not a hybridoma are applied at a rate of about 2 ml/min at room temperature to a column of Sepharose-4B (Pharmacia, Belgium) on which "y" mg of rat monoAb anti-mouse Ig has been immobilized. The column is washed with 100-120 ml of phosphate buffered saline (PBS), then 100 ml of PBS containing 2.5 M NaCl, and then again at normal salinity with 100 ml of PBS. Mouse immunoglobulins are eluted by decreasing the pH with glycin HCL 0.1 M + 0.15 M NaCl buffer at pH 2.8*. The eluted fractions are neutralized as rapidly as possible after the elution with glycin NaOH buffer (0.1 M, pH 8.6) (Bazin et al., 1986; Cormont et al., 1986).

Examples of capacity of monoAb immunoaffinity column can be found in Bazin and Malache (1986).

For example, with the present experimental conditions, they were of 0.2 mg of mouse IgM for 1 mg of LO-MM-9 coupled to Sepharose-4B and 1 mg of mouse IgG1 for 1 mg of LO-MG1-2 coupled to Sepharose-4B.

*Depending on the rat monoclonal antibodies, the pH of the eluting buffer could be from pH 2.8 to pH 4.5.

REFERENCES

BAZIN H., CORMONT F., DE CLERCQ L. Purification of rat monoclonal antibodies. Methods in Enzymology 1986, <u>121</u>, 638-652.

CORMONT F., MANOUVRIEZ P., DE CLERCQ L., BAZIN H. The use of rat monoclonal antibodies to characterize, quantify and purify polyclonal or monoclonal mouse IgM. Methods in Enzymology 1986, <u>121</u>, 622-631.

BAZIN H., MALACHE J.M. Rat (and mouse) monoclonal antibodies.V.A simple automated technique of antigen purification by immunoaffinity chromatography. J. Immunol. Methods 1986, <u>88</u>, 19-24.

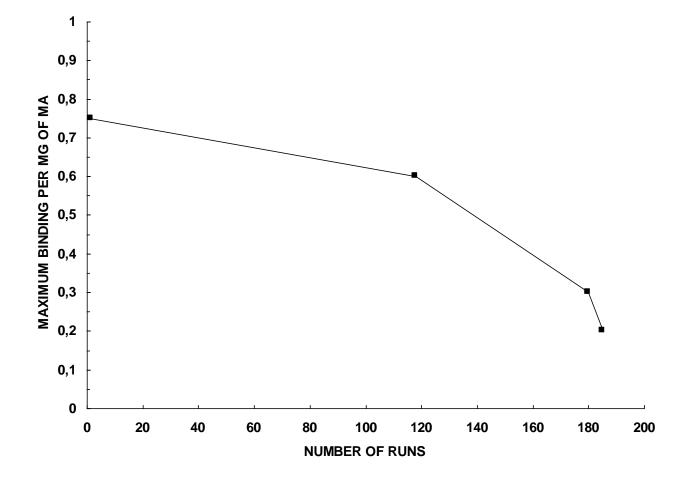
IMMUNOAFFINITY PURIFICATION OF MOUSE IMMUNOGLOBULINS BY RAT MAb: INDICATIVE VALUES OF ELUTION (pH or ionic strength)

MAb Sepharose 4B	Elution buffer NaCl 2.5 M	Elution buffer NaCl 0.9 M	Elution buffer NaCl 0.9 M	Elution buffer NaCl 0.9 M
	рН 7.2	рН 4.5	рН 3.8	pH 2.8
LO-MK-2	0	0	Х	XX
LO-MM-9	0	0	XX	XX
LO-MG1-2	0	0	Х	XX
LO-MG2a-3	0	0	XX	XX
LO-MG2b-1	XX	XX	XX	XX
LO-MG2b-2	0	0	XX	XX

0: no elution; X: partial elution; XX: complete elution.

EXAMPLES OF BINDING CAPACITIES OF MOUSE IMMUNOGLOBULIN BY RAT MAb

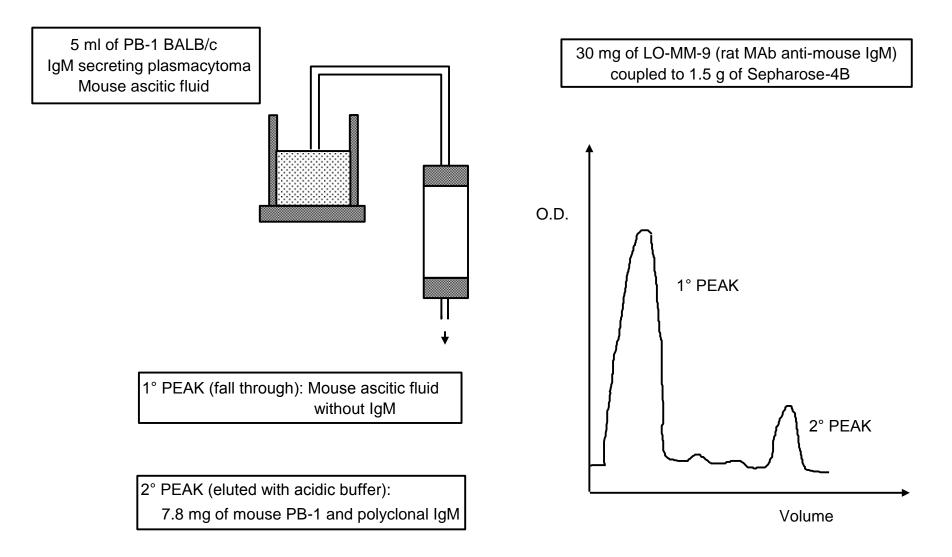
MAb-Sepharose 4B	Number of runs already	Capacity (in mg) of	
	done with the column	binding per mg of MAb	
LO-MK-2	2	0.45	
LO-MM-9	38	0.2	
LO-MG1-2	26	1.0	
LO-MG2a-3	28	0.55	
LO-MG2b-1	7	0.16	
LO-MG2b-2	28	0.41	



Immunoglobulin binding capacity in function of the number of runs (example taken in Bazin and Malache, J. Immunol. Methods 1986, 88: 19-24 Monoclonal antibody: MARK- 1). Most of the rat MAbs antimouse Ig isotypes seem to have a rather similar stability.

EXAMPLE

PURIFICATION BY IMMUNOAFFINITY OF IgM MAb



Immunoglobulin to be purified	Column	1st peak (fall through)	2nd peak (eluted with acidic buffer)
5 ml of PB-1 BALB/c IgM secreting plasmacytoma mouse ascitic fluid	30 mg of LO-MM-9 (rat MAb anti- mouse IgM) coupled to 1.5 g of Sepharose 4B	Mouse ascitic fluid without IgM	7.8 mg of mouse PB-1 and polyclonal IgM
10 ml MARD-3 BALB/c IgG1 secreting MAb mouse ascitic fluid	25 mg of LO-MG1-2 (rat MAb anti- mouse IgG1) coupled to 1.0 g of Sepharose-4B	Mouse ascitic fluid without IgG1	20 mg of mouse MARD-3 and polyclonal IgG1
5 ml of MOPC-173 BALB/c IgG2a secreting plasmacytoma mouse ascitic fluid	25 mg of LO-MG2a-3 (rat MAb anti-mouse IgG2a) coupled to 1.0 g of Sepharose-4B	Mouse ascitic fluid without IgG2a	17.2 mg of mouse MOPC-173 and polyclonal IgG2a
7 ml of C1907 B3* BALB/c IgG2b secreting plasmacytoma mouse ascitic fluid	50 mg of LO-MG2b-2 (rat MAb anti-mouse IgG2b) coupled to 2.0 g of Sepharose-4B	Mouse ascitic fluid without IgG2b	21.9 mg of mouse C1907 B3 and polyclonal IgG2b
7.5 ml of MOPC-173 BALB/c IgG2a kappa secreting plasmacytoma mouse ascites	35 mg of LO-MK-2 (rat MAb anti- mouse Ig kappa) coupled to 2.0 g of Sepharose-4B	Mouse ascitic fluid without kappa L- chain immunoglobulin	12.4 mg of mouse MOPC-173 and polyclonal Ig kappa
45 ml of normal mouse ascitif fluid	30 mg of LO-MM-9 (rat MAb anti- mouse IgM) coupled to 1.5 g of Sepharose-4B	Normal mouse ascitic fluid without IgM	3.7 mg of mouse polyclonal IgM
30 ml of normal mouse ascitic fluid	25 mg of LO-MG1-2 (rat MAb anti- mouse IgG1) coupled to 1.0 g of Sepharose-4B	Normal mouse ascitic fluid without IgG1	16.0 mg of mouse polyclonal IgG1
25 ml of normal mouse ascitic fluid	25 mg of LO-MG2a-3 (rat MAb anti-mouse IgG2a) coupled to 1.0 g of Sepharose-4B	Normal mouse ascitic fluid without IgG2a	9.1 mg of mouse polyclonal IgG2a
25 ml of normal mouse ascitic fluid	50 mg of LO-MG2b-2 (rat MAb anti-mouse IgG2b) coupled to 2.0 g of Sepharose-4B	Normal mouse ascitic fluid without IgG2b	7.5 mg of mouse polyclonal IgG2b
15 ml of normal mouse ascitic fluid	35 mg of LO-MK-2 (rat MAb anti- mouse Ig kappa) coupled to 2.0 g of Sepharose-4B	Normal mouse ascitic fluid without kappa L-chain immunoglobulin	12.0 mg of mouse polyclonal Ig kappa.

*Kindly provided by Dr J. Van Snick (UCL)

CROSS-REACTIVITY TEST OF RAT ANTI-MOUSE Ig MAb WITH HUMAN IMMUNOGLOBULIN

Experimental conditions

EIA plates (NUNC, Denmark, Cat. No. 4-69914) were coated overnight at 4°C with 10 µg/ml polyclonal human IgG (Gamma 16, Institut Mérieux, France) in 0.01M borate buffer at pH 9.6. Remaining binding sites were saturated with 0.5% gelatin in PBS 0.1% Tween. MAbs were revealed with peroxidase labeled Rabbit anti-Rat Ig antibodies. All incubations were done for 1 hour at room temperature and washings made with PBS 0.1% Tween. A signal was considered as positive if twice the background O.D. obtained by incubation with P.O. labeled antibody without previous incubation with rat antibodies.

Results

Antibody	Concentration at which a positive signal appears	Cross-reaction with human Ig
LO-MK-1	> 15600 ng/ml	No
LO-MG1-2	< 15 ng/ml	Yes
LO-MG1-13	> 1200 ng/ml	Yes*
LO-MG2a-2	> 62500 ng/ml	No
LO-MG2a-3	not at 250000 ng/ml	No
LO-MG2b-2	not at 250000 ng/ml	No
LO-MG3-7	> 15600 ng/ml	No

*Yes, but sometimes, can be avoided by careful manipulations.

When labeled with P.O., these MAbs can be used at concentrations of 125-500 ng/ml.

DESIGNATION OF CELL LINE AND PRODUCT : LO-MK-1

IMMUNOGEN

SUBSTANCE NAME: purified mouse IgG1 kappa from BALB/c mice **IMMUNOGEN TISSUE SOURCE** : serum

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : OKA inbred strain

<u>IMMORTAL CELL PARTNER</u> DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG2a, allotype IgK-1b NAME FOR CELL LINE : LO-MK-1 HYBRIDOMA NAME FOR PRODUCT : LO-MK-1 MONO Ab ICDB NUMBER: 3000334

<u>REACTIVITY</u>: Mouse kappa light chain of immunoglobulin (determined by immunodot), positively tested on BALB/c and C57BL/6 mouse sera. LO-MK-1 and LO-MK-2 do not bind to the same epitope.

<u>**CROSS-REACTIVITY</u>**: does not cross-react with chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon, and human IgG and with human IgM (ELISA test).</u>

<u>AVIDITY</u>: on mouse IgG2a kappa: 3 x 10⁹ M⁻¹ Cf. avidity sheet, for more details

<u>APPLICATIONS</u>: Cf REACTIVITY

- CAN BE LABELLED WITH PEROXIDASE
- CAN BE LABELLED WITH FITC
- CAN BE LABELLED WITH BIOTIN
- CAPTURE ELISA: LOW BINDING ON PLASTICS
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CANNOT BE USED FOR IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse Kappa Ig (NO ELUTION at pH 2.8).
- CAN BE USED IN IMMUNOHISTOLOGY (as second antibody labelled with peroxidase or FITC) (2)

LYOPHILIZATION: Yes, with a possible low denaturation.

REFERENCE

 Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618
 Latinne et al. Immunol. Rev. 1994, 141: 95-125

Selected references of scientific publications in which LO-MK-1 MAb was used:

Delaunay T. et al. J. Immunol. Methods, 1990, 131: 33-39.

Denis O. et al. Internat. Immunol., 1993, 5 (1) : 71-78.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-MK-2

IMMUNOGEN

SUBSTANCE NAME : purified IgG kappa from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

<u>IMMORTAL CELL PARTNER</u> DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-MK-2 HYBRIDOMA NAME FOR PRODUCT : LO-MK-2 MONO Ab ICDB NUMBER: 3000335

<u>REACTIVITY</u>: Kappa Light Chain of Mouse Immunoglobulin (determined by immunodot), positively tested on BALB/c and C57BL/6 mouse sera. LO-MK-1 and LO-MK-2 do not bind to the same epitope.

<u>**CROSS-REACTIVITY</u>**: does not cross-react with chicken, rabbit, goat, horse and baboon human IgG and with human IgM. Cross-react with dog, sheep, swine and bovine IgG (ELISA test), probably by their kappa light chain, but not tested.</u>

AVIDITY: on mouse kappa IgM: 2 x 108 M⁻¹ on mouse kappa IgG1: 1 x 109 M⁻¹ on mouse kappa IgG2a:3 x 109 M⁻¹ on mouse kappa IgG2b:2 x 109 M⁻¹ on mouse kappa IgG3: 2 x 109 M⁻¹

APPLICATIONS: Cf REACTIVITY

- LABELLED SECOND ANTIBODY, but less efficient than LO-MK-1
- CAN BE LABELLED WITH PEROXIDASE, FITC AND BIOTIN
- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of Mouse Kappa Ig (Solid phase Sepharose 4B CNBr act.)

LYOPHILIZATION: Yes.

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

Selected references of scientific publications in which LO-MK-2 MAb was used: Delaunay T. et al. J. Immunol. Methods, 1990, 131: 33-39. Vanhove B., Bazin H. Immunology 1993, 79: 580-586.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-MK-3

IMMUNOGEN

SUBSTANCE NAME : purified IgG kappa from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : OKA inbred strain

IMMORTAL CELL PARTNER DESIGNATION : Non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat kappa IgM, allotype IgK-1b NAME FOR CELL LINE : LO-MK-3 HYBRIDOMA NAME FOR PRODUCT : LO-MK-3 MONO Ab ICDB NUMBER: 3000336

<u>REACTIVITY</u> : Kappa Light Chain of Mouse Immunoglobulin (determined by immunodot)

<u>CROSS-REACTIVITY</u>: doesn't cross-react with rat Ig (ELISA test).

AVIDITY: on mouse IgG2a kappa: 1 x 10⁷ M⁻¹ Cf. avidity sheet, for more details

<u>APPLICATIONS</u> : Cf REACTIVITY - CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS - CAPTURE ELISA: LOW BINDING ON PLASTICS

AVAILABILITY: ONLY IN ASCITIC FLUID OR SUPERNATANT FORMS.

LYOPHILIZATION: Yes, but with denaturation.

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids 1982, Peeters E. ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615- 618.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-MM-3

IMMUNOGEN

SUBSTANCE NAME : purified IgM (Mouse polyclonal IgM) from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgM, allotype IgK-1a. NAME FOR CELL LINE : LO-MM-3 HYBRIDOMA NAME FOR PRODUCT : LO-MM-3 MONO Ab ICDB NUMBER: 3003924

<u>REACTIVITY</u> : Mu heavy chain of Mouse immunoglobulin (2) (determined by immunodot)

AVIDITY: on mouse IgM: 2 x 10⁸ M⁻¹ Cf. avidity sheet, for more details

<u>CROSS-REACTIVITY</u>: does not bind to rabbit, swine and human IgG. Weak reaction with chicken, goat, sheep, bovine, horse, dog, baboon IgG and with human IgM (ELISA test).

APPLICATIONS : Cf REACTIVITY

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAN BE LABELLED WITH TRITC
- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse IgM (Solid phase Sepharose 4B CNBr act.)

LYOPHILIZATION: not tested

REFERENCES

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

(2) Cormont F., Manouvriez P., De Clercq L., Bazin H. The use of rat monoclonal antibodies to characterize, quantify and purify polyclonal or monoclonal mouse IgM. Meth. in Enzymol. 1986,121:622-631

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-MM-8

IMMUNOGEN

SUBSTANCE NAME : purified IgM (Mouse polyclonal IgM) from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a. NAME FOR CELL LINE : LO-MM-8 HYBRIDOMA NAME FOR PRODUCT : LO-MM-8 MONO Ab ICDB NUMBER:

<u>REACTIVITY</u> : Mu heavy chain of Mouse immunoglobulin (2) (determined by immunodot)

AVIDITY: on mouse IgM: 3.6 x 10⁹ M⁻¹ Cf. avidity sheet, for more details

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAN BE LABELLED WITH PEROXIDASE AND BIOTIN

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELED WITH PEROXIDASE

LYOPHILIZATION: not tested

REFERENCES

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

(2) Cormont F., Manouvriez P., De Clercq L., Bazin H. The use of rat monoclonal antibodies to characterize, quantify and purify polyclonal or monoclonal mouse IgM. Meth. in Enzymol. 1986,121:622-631

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-MM-9

IMMUNOGEN

SUBSTANCE NAME : purified IgM (Mouse polyclonal IgM) from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE : LO-MM-9 HYBRIDOMA NAME FOR PRODUCT : LO-MM-9 MONO Ab ICDB NUMBER: 3039019

<u>REACTIVITY</u>: Mu heavy chain of Mouse immunoglobulin (2) (determined by immunodot), positively tested on BALB/c and C57BL/6 mouse sera. It binds to an epitope in the C μ 3 domain.

<u>CROSS-REACTIVITY</u>: does not bind to human myeloma of IgM, IgG, IgA, IgD, IgE isotypes. Does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon IgG (ELISA test).

<u>AVIDITY:</u>on mouse IgM: 6.8 x 10⁸ M⁻¹ by BIACORE (Pharmacia)* Cf. avidity sheet, for more details

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAN BE LABELLED WITH IODINE (2), FITC and BIOTIN
- CANNOT BE LABELLED WITH PEROXIDASE (use LO-MM-8)
- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse IgM (Solid phase Sepharose 4B CNBr act.) capacity: see data sheet.
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY (purified) (3)

LYOPHILIZATION: Yes, but with partial denaturation.

REFERENCES

(1) Bazin H. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618; (2) Cormont F., Manouvriez P., De Clercq L., Bazin H. Meth. in Enzymol. 1986, 121: 622-631; Bazin H., Malache J.M. J. Immunol. Meth. 1986, 88: 19-24; (3) Latinne et al. Immunol. Rev. 1994, 141: 95-125

Selected references of scientific publications in which LO-MM-9 MAb was used

Bendelac A. et al. J. Immunol., 1988, 141:2625-2628; Cerny A. et al. Transplantation, 1988, 45: 1111-1113.

Cerny A. et al. J. Virol., 1988, 62: 1803-1807; Cormont F. et al. Meth. Enzymol., 1986, 121: 622-631; Denis O. et al. Int. Immunol., 1993, 5 (1): 71-78; Latinne D. et al. Immunol. Rev. 1994, 141: 95-125; Chentoufi A. et al. Transplantation, 1999, 68: 1728-1736.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

FOR RESEARCH ONLY

* Kindly determined by Th. Delaunay (INRA, FRANCE)

IMMUNOGEN

SUBSTANCE NAME : purified polyclonal IgA (Mouse IgA) from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgM, allotype IgK-1a NAME FOR CELL LINE : LO-MA-7 HYBRIDOMA NAME FOR PRODUCT : LO-MA-7 MONO Ab ICDB NUMBER: 3042716

<u>REACTIVITY</u> : Mouse alpha heavy chain of immunoglobulin (determined by immunodot)

<u>**CROSS-REACTIVITY</u>**: does not bind to human IgG and IgM. Does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon IgG (ELISA test).</u>

AVIDITY: on mouse IgA: $4.8 \times 10^9 M^{-1}$

APPLICATIONS : Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN

- CANNOT BE LABELLED WITH FITC AND PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAPTURE ELISA: LOW BINDING ON PLASTICS

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse IgA (solid phase Sepharose 4b CNBr act.) - capacity: see data sheet.

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN

SUBSTANCE NAME : purified polyclonal IgA from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgM, allotype IgK-1a NAME FOR CELL LINE : LO-MA-10 HYBRIDOMA NAME FOR PRODUCT : LO-MA-10 MONO Ab ICDB NUMBER: 3046715

<u>REACTIVITY</u>: Mouse alpha heavy chain of immunoglobulin (determined by immunodot), positively tested on BALB/c and C57BL/6 mouse sera.

<u>**CROSS-REACTIVITY</u>**: does not bind to human IgG and IgM. Does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon IgG (ELISA test).</u>

AVIDITY: on mouse IgA: $2.9 \times 10^9 M^{-1}$

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH PEROXIDASE AND BIOTIN
- CANNOT BE LABELLED WITH FITC
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN

SUBSTANCE NAME: IgD (MOUSE DELTA HEAVY CHAIN OF IMMUNOGLOBULIN) TEPC 1017, TEPC 1033 (1)

GENUS SPECIES : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER

DESIGNATION : Non secreting LOU/C rat IR983F fusion line (2)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE : LO-MD-6 HYBRIDOMA NAME FOR PRODUCT : LO-MD-6 MONO Ab ICDB NUMBER: 3046717

<u>REACTIVITY</u> : Mouse delta heavy chain of immunoglobulin (determined by immunodot)

<u>CROSS-REACTIVITY</u>: Does not bind to human IgG and IgM. Does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon IgG (ELISA test).

AVIDITY (3): on Mouse IgD : $1.2 \times 10^9 \text{ M}^{-1}$ by BIACORE (Pharmacia)*.

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH BIOTIN
- CAN BE LABELLED WITH PEROXIDASE AND FITC.
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- IMMUNOFFINITY CHROMATOGRAPHY for purification of mouse IgD (solid phase Sepharose 4b CNBr act.) capacity: see data sheet.
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE

REFERENCES

(1) Finkelman F.O., Kessler J.W., Mushinski J.F. and Potter M. IgD-secreting murine plasmacytomas: identification and partial characterization of two IgD myeloma proteins. J. Immunol. 1981, 126: 680.

(2) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids 1982, Peeters E. ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615- 618.

(3) Van Heymingen et al. J. Immunol. Methods 1983, 62: 147-153.

Selected references of scientific publications in which LO-MD-6 MAb was used

Goroff D.K., Holmes, J.M., Bazin, H., Nisol, F., Finkelman, F.D. J. Immunol., 1991, 146 : 18-25 (in this paper, LO-MD-6 is named Hb δ -6); Denis O., Latinne D., Nisol F., Bazin H. Int. Immunol., 1993, 5 (1): 71-78; Latinne D. et al. Immunol. Rev. 1994, 141: 95-125, Chentoufi A. et al. Transplantation, 1999, 68: 1728-1736.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

FOR RESEARCH ONLY

*Kindly determined by Th. Delaunay (INRA, France).

IMMUNOGEN

SUBSTANCE NAME: IgD (MOUSE DELTA HEAVY CHAIN OF IMMUNOGLOBULIN) TEPC 1017

GENUS SPECIES : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER

DESIGNATION : Non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-MD-8 HYBRIDOMA NAME FOR PRODUCT : LO-MD-8 MONO Ab ICDB NUMBER: 3070309.

<u>REACTIVITY</u> : Mouse delta heavy chain of immunoglobulin (determined by immunodot)

AVIDITY (2): on mouse IgD: $2.9 \times 10^9 \text{ M}^{-1}$

APPLICATIONS : Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN AND PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

REFERENCES

 Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids 1982, Peeters E. ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615- 618.
 Van Heymingen et al. J. Immunol. Methods 1983, 62: 147-153.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : purified mouse IgE from BALB/c mice GENUS SPECIES : Mus musculus - mouse

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE : LO-ME-2 HYBRIDOMA NAME FOR PRODUCT : LO-ME-2 MONO Ab ICDB NUMBER: 3003926

<u>REACTIVITY</u>: Mouse epsilon heavy chain of immunoglobulin (determined by immunodot), positively tested on BALB/c and C57BL/6 mouse sera. LO-ME-2 and LO-ME-3 do not bind to the same epitope.

<u>CROSS-REACTIVITY</u>: does not bind to human IgG and IgM. Does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon IgG (ELISA test).

<u>AVIDITY:</u>on mouse IgE: 2 x 10⁹ M⁻¹ Cf. avidity sheet, for more details

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH PEROXIDASE

- CAN BE LABELLED WITH BIOTIN

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse IgE (solid phase Sepharose 4B CNBr act.).

LYOPHILIZATION: Yes.

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

Selected reference of scientific publication in which LO-ME-2 MAb was used

Chavez M. et al. Int. Arch. All. Immunol. 1992,97:330-336.

Goboriau-Routhiau V. and Moreau M.C. Pediatric Research 1996,39:625.

Moreau-M.C. and Goboriau-Routhiau V. Res. Immunol. 1996,147:49.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : purified IgE (Mouse IgE) from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus- rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-ME-3 HYBRIDOMA NAME FOR PRODUCT : LO-ME-3 MONO Ab ICDB NUMBER: 3003927

REACTIVITY : Mouse epsilon heavy chain of immunoglobulin (determined by immunodot)
positively tested on BALB/c and C57BL/6 mouse sera.
LO-ME-2 and LO-ME-3 do not bind to the same epitope.
LO-ME-3 doen't cross-react with rat IgE.

<u>**CROSS-REACTIVITY</u>**: does not bind to human IgG and IgM. Does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, wine, baboon IgG (ELISA test).</u>

<u>AVIDITY:</u>on mouse IgE: 3 x 10⁹ M⁻¹ Cf. avidity sheet, for more details

APPLICATIONS: Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH BIOTIN

- CAN BE LABELLED WITH PEROXIDASE

- CAN BE LABELLED WITH FITC

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)

LYOPHILIZATION: yes.

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618 <u>Selected references of scientific publications in which LO-ME-3 MAb was used</u> Chavez M. et al. Int. Arch. All. Immunol. 1992,97:330-336.
El Bouhdidi et al. Parasite Immunology 1994, 16: 69-76 Pierre P. et al. Eur. J. Immunol., 1992, 22: 3179-3182
Van Mechelen M. et al. Int. Immunol. 1995, 7: 199-205.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : purified mouse IgG1 from BALB/c mice GENUS SPECIES : Mus musculus - mouse

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-MG1-2 HYBRIDOMA NAME FOR PRODUCT : LO-MG1-2 MONO Ab ICDB NUMBER: 3042711

<u>REACTIVITY</u>: Mouse gamma1 heavy chain of immunoglobulin (determined by immunodot), positively tested on BALB/c and C57BL/6 mouse sera.

The specificity of every rat monoclonal antibody anti-mouse IgG subclasses is determined in a range of optimal concentrations. Increasing the first or the second antibody at an unnecessary too high concentration can induce possible cross-reactions with other mouse IgG subclasses. LO-MG1-2 and LO-MG1-13 do not bind to the same epitope.

AVIDITY: on mouse IgG1: 9 x 10⁸ M⁻¹

Cf. avidity sheet, for more details

<u>**CROSS-REACTIVITY</u>**: does not cross react with a normal serum of rat and rat IgG1, IgG2a, IgG2b, IgM and IgA secreting hybridomas supernatants. It cross-reacts with highly concentrated rat IgG2c supernatant. It does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog IgG and human IgM. It binds to swine, human IgG and weakly baboon IgG (ELISA test).</u>

APPLICATIONS: Cf REACTIVITY

- CAN BE LABELLED WITH FITC

- CAN BE LABELLED WITH BIOTIN
- CAN BE LABELLED WITH PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse IgG1 (Solid phase Sepharose 4b CNBr act.) capacity: see data sheet.

LYOPHILIZATION: Yes, with a low possible denaturation.

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed.,29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

Selected references of scientific publications in which LO-MG1-2 MAb was used

Pierre P. et al. Eur. J. Immunol., 1992, 22: 3179-3182

Denis O. et al. Int. Immunol., 1993, 5 (1): 71-78.

El Bouhdidi et al. Parasite Immunology 1994, 16: 69-76

Vanhove B., Bazin H. Immunology 1993, 79: 580-586.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN

SUBSTANCE NAME : purified mouse IgG1 from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-MG1-13 HYBRIDOMA NAME FOR PRODUCT : LO-MG1-13 MONO Ab ICDB NUMBER: 3003928

<u>REACTIVITY</u>: Mouse gammal heavy chain of immunoglobulin (determined by immunodot) The specificity of every rat monoclonal antibody anti-mouse IgG subclasses is determined in a range of optimal concentrations. Increasing the first or the second antibody at an unnecessary too high concentration can induce possible cross-reactions with other mouse IgG subclasses. LO-MG1-2 and LO-MG1-13 do not bind to the same epitope.

<u>CROSS-REACTIVITY</u>: does not bind to human IgG and IgM. Does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog and swine IgG. Weakly cross-reacts with baboon IgG (ELISA test).

AVIDITY: on mouse IgG1: $5.1 \times 10^9 M^{-1}$ (Cf. avidity sheet, for more details).

APPLICATIONS: Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH BIOTIN
- CAN BE LABELLED WITH PEROXIDASE AND FITC
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST (ON MOUSE) OR AS SECOND ANTIBODY (ON RAT) LABELLED WITH PEROXIDASE

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed.,29th collloquium 1981 Pergamon Press Oxford and N.Y. : 615-618 <u>Selected references of scientific publications in which LO-MG1-13 MAb was used</u>
Soares M. et al. Transplantation Proceedings, 1992, 24:51-452.
Denis O. et al. Int. Immunol., 1993, 5 (1): 71-78.
Soares M. et al. Transplantation 1993, 56: 1427-1433.
Van Mechelen M. et al. Int. Immunol. 1995, 7: 199-205.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : purified mouse IgG1 from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-MG1-15 HYBRIDOMA NAME FOR PRODUCT : LO-MG1-15 MONO Ab ICDB NUMBER: 3003929

<u>REACTIVITY</u>: Mouse gammal heavy chain of immunoglobulin (determined by immunodot) The specificity of every rat monoclonal antibody anti-mouse IgG subclasses is determined in a range of optimal concentrations. Increasing the first or the second antibody at an unnecessary too high concentration can induce possible cross-reactions with other mouse IgG subclasses.

<u>**CROSS-REACTIVITY</u>**: it binds to swine and human IgG. Does not bind to rabbit, bovine IgG or human IgM (ELISA test).</u>

AVIDITY: on mouse IgG1: $2.8 \times 10^9 \text{ M}^{-1}$

APPLICATIONS : Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN

- CAN BE LABELLED WITH FITC

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : purified IgG from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER

DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE : LO-MG2a-2 HYBRIDOMA NAME FOR PRODUCT : LO-MG2a-2 MONO Ab ICDB NUMBER: 3000327

<u>REACTIVITY</u>: Mouse Gamma2a Heavy Chain of Immunoglobulin (determined by immunodot) The specificity of every rat monoclonal antibody anti-mouse IgG subclasses is determined in a range of optimal concentrations. Increasing the first or the second antibody at an unnecessary too high concentration can induce possible cross-reactions with other mouse IgG subclasses.

<u>CROSS-REACTIVITY</u>: does not bind to chicken, rabbit, goat, horse, swine, baboon, and human IgG. Does not bind to human IgM. It binds to dog and weakly sheep and bovine IgG (ELISA test).

<u>AVIDITY:</u>on mouse IgG2a: 7 x 10⁹ M⁻¹ See avidity sheet, for more details.

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN AND PEROXIDASE
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAPTURE ELISA: LOW BINDING ON PLASTICS
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse IgG2a (Solid phase Sepharose 4B CNBr act.)

LYOPHILIZATION: Yes, possibly with a low denaturation.

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot.
 Biol. Fluids, 1982, Peeters E. ed., 29th Colloquium 1981 Pergamon Press, Oxford and N.Y., pp. 615-618.
 <u>Selected reference of scientific publication in which LO-MG2a-2 MAb was used</u>
 El Bouhdidi et al. Parasite Immunology 1994, 16: 69-76

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : purified IgG from BALB/c mice GENUS SPECIES : Mus musculus - mouse

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE : LO-MG2a-3 HYBRIDOMA NAME FOR PRODUCT : LO-MG2a-3 MONO Ab ICDB NUMBER: 3000328

<u>REACTIVITY</u>: Mouse Gamma2a Heavy Chain of Immunoglobulin (determined by immunodot) The specificity of every rat monoclonal antibody anti-mouse IgG subclasses is determined in a range of optimal concentrations. Increasing the first or the second antibody at an unnecessary too high concentration can induce possible cross-reactions with other mouse IgG subclasses.

<u>**CROSS-REACTIVITY</u>**: does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine and baboonIgG and human IgG or IgM (ELISA test).</u>

<u>**AVIDITY:**</u> on mouse IgG2a: $3 \times 10^9 \text{ M}^{-1}$ Cf. avidity sheet, for more details.

APPLICATIONS: Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN AND PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAPTURE ELISA: LOW BINDING ON PLASTICS

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse IgG2a (solid phase Sepharose 4B CNBr act.) - capacity: see data sheet.

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th Colloquium 1981 Pergamon Press, Oxford and N.Y., pp. 615-618. <u>Selected references of scientific publications in which LO-MG2a-3 MAb was used</u> Pierre P. et al. Eur. J. Immunol., 1992, 22: 3179-3182

Denis O. et al. Int. Immunol., 1993, 5 (1): 71-78.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN

SUBSTANCE NAME : purified IgG from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER

DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-MG2a-7 HYBRIDOMA NAME FOR PRODUCT : LO-MG2a-7 MONO Ab ICDB NUMBER: 3003930

<u>REACTIVITY</u>: Mouse Gamma2a Heavy Chain of Immunoglobulin (determined by ELISA), positively tested on BALB/c and negatively or very weakly on C57BL/6 mouse sera. The specificity of every rat monoclonal antibody anti-mouse IgG subclasses is determined in a range of optimal concentrations. Increasing the first or the second antibody at an unnecessary too high concentration can induce possible cross-reactions with other mouse IgG subclasses.

<u>**CROSS-REACTIVITY</u>**: does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon IgG and human IgG or IgM (ELISA test).</u>

AVIDITY: On mouse IgG2a: 5.1 x 10⁹ M⁻¹

APPLICATIONS : Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN, FITC AND PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th Colloquium 1981 Pergamon Press, Oxford and N.Y., pp. 615-618.

<u>Selected reference of scientific publication in which LO-MG2a-7 MAb was used</u> Van Mechelen M. et al. Int. Immunol. 1995, 7: 199-205.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN

SUBSTANCE NAME : purified polyclonal IgG2a from BALB/c mice **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER

DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-MG2a-9 HYBRIDOMA NAME FOR PRODUCT : LO-MG2a-9 MONO Ab ICDB NUMBER:

<u>REACTIVITY</u>: Mouse Gamma2a Heavy Chain of Immunoglobulin (determined by ELISA), positively tested on BALB/c and C57BL/6 mouse sera. The specificity of every rat monoclonal antibody anti-mouse IgG subclasses is determined in a range of optimal concentrations. Increasing the first or the second antibody at an unnecessary too high concentration can induce possible cross-reactions with other mouse IgG subclasses.

<u>**CROSS-REACTIVITY</u>**: does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon IgG and human IgG or IgM (ELISA test).</u>

AVIDITY: On mouse IgG2a: 2.5 x 10⁹M⁻¹

APPLICATIONS : Cf REACTIVITY

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse IgG2a (solid phase Sepharose 4B CNBr act.) - capacity and conditions of elution: see data sheet.

- CAN BE LABELLED WITH BIOTIN, FITC AND PEROXIDASE
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAPTURE ELISA: GOOD BINDING ON PLASTICS

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th Colloquium 1981 Pergamon Press, Oxford and N.Y., pp. 615-618.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : polyclonal IgG from BALB/c mice GENUS SPECIES : Mus musculus - mouse

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : Non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat lambda IgG1 NAME FOR CELL LINE : LO-MG2b-1 HYBRIDOMA NAME FOR PRODUCT : LO-MG2b-1 MONO Ab

ICDB NUMBER: 3003931

<u>REACTIVITY</u>: Mouse Gamma2b Heavy Chain of Immunoglobulin (determined by immunodot) The specificity of every rat monoclonal antibody anti-mouse IgG subclasses is determined in a range of optimal concentrations. Increasing the first or the second antibody at an unnecessary too high concentration can induce possible cross-reactions with other mouse IgG subclasses.

<u>**CROSS-REACTIVITY</u>**: does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon IgG and human IgG or IgM (ELISA test).</u>

AVIDITY: on mouse IgG2b: 3 x 10⁸ M⁻¹ Cf. avidity sheet, for more details.

<u>APPLICATIONS</u> : Cf REACTIVITIES

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse IgG2b (solid phase Sepharose 4B CNBr act.) - capacity and conditions of elution: see data sheet.

- CAN BE LABELLED WITH FITC
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAPTURE ELISA: MIDDLE BINDING ON PLASTICS

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed. 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : purified IgG from BALB/c mice GENUS SPECIES : Mus musculus - mouse

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : Non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-MG2b-2 HYBRIDOMA NAME FOR PRODUCT : LO-MG2b-2 MONO Ab ICDB NUMBER: 3000329

<u>REACTIVITY</u>: Mouse Gamma2b Heavy Chain of Immunoglobulin (determined by immunodot), positively tested on BALB/c and C57BL/6 mouse sera.

The specificity of every rat monoclonal antibody anti-mouse IgG subclasses is determined in a range of optimal concentrations. Increasing the first or the second antibody at an unnecessary too high concentration can induce possible cross-reactions with other mouse IgG subclasses.

<u>CROSS-REACTIVITY</u>: does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon IgG and human IgG or IgM (ELISA test).

AVIDITY: on mouse IgG2b: 1 x 10¹⁰ M⁻¹ Cf. avidity sheet, for more details

APPLICATIONS: Cf REACTIVITY

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse IgG2b (solid phase Sepharose 4B CNBr act.) - capacity: see data sheet.

- CAN BE LABELLED WITH FITC, BIOTIN AND PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAPTURE ELISA: LOW BINDING ON PLASTICS

- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)

LYOPHILIZATION: Yes, possibly with a low denaturation.

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed. 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.

Selected references of scientific publications in which LO-MG2b-2 MAb was used

Denis O. et al. Int. Immunol., 1993, 5 (1): 71-78.

El Bouhdidi et al. Parasite Immunology 1994, 16: 69-76

Pierre P. et al. Eur. J. Immunol., 1992, 22: 3179-3182

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

<u>IMMUNOGEN</u> <u>SUBSTANCE NAME</u> : polyclonal and monoclonal mouse IgG3 GENUS SPECIES : Mus musculus - mouse

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : Non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat kappa IgM, allotype IgK-1a NAME FOR CELL LINE : LO-MG3-7 HYBRIDOMA NAME FOR PRODUCT : LO-MG3-7 MONO Ab ICDB NUMBER: 3003932

<u>REACTIVITY</u>: Mouse Gamma3 Heavy Chain of Immunoglobulin (determined by immunodot) The specificity of every rat monoclonal antibody anti-mouse IgG subclasses is determined in a range of optimal concentrations. Increasing the first or the second antibody at an unnecessary too high concentration can induce possible cross-reactions with other mouse IgG subclasses.

<u>**CROSS-REACTIVITY</u>**: does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon IgG and human IgG or IgM (ELISA test).</u>

<u>AVIDITY:</u>on mouse IgG3: 2 x 10¹⁰ M⁻¹ Cf. avidity sheet, for more details

APPLICATIONS: Cf REACTIVITY

- CAN BE LABELLED WITH FITC, BIOTIN AND PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot.
 Biol. Fluids, 1982, Peeters E. ed. 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.
 <u>Selected references of scientific publications in which LO-MG3-7 MAb was used</u>
 Pierre P. et al. Eur. J. Immunol., 1992, 22: 3179-3182
 El Bouhdidi et al. Parasite Immunology 1994, 16: 69-76

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN

SUBSTANCE NAME : polyclonal and monoclonal mouse IgG3 **GENUS SPECIES** : Mus musculus - mouse

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER

DESIGNATION : Non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-MG3-13 HYBRIDOMA NAME FOR PRODUCT : LO-MG3-13 MONO Ab ICDB NUMBER: 3046730

<u>REACTIVITY</u>: Mouse Gamma3 Heavy Chain of Immunoglobulin (determined by immunodot), positively tested on BALB/c and C57BL/6 mouse sera.

The specificity of every rat monoclonal antibody anti-mouse IgG subclasses is determined in a range of optimal concentrations. Increasing the first or the second antibody at an unnecessary too high concentration can induce possible cross-reactions with other mouse IgG subclasses.

<u>**CROSS-REACTIVITY</u>**: does not bind to chicken, rabbit, goat, sheep, bovine, horse, dog, swine, baboon IgG and human IgG or IgM (ELISA test).</u>

AVIDITY: on mouse IgG3: 6.8 x 10⁹ M⁻¹ Cf. avidity sheet, for more details

APPLICATIONS: Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN, PEROXIDASE AND FITC.
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of mouse IgG3 (solid phase Sepharose 4b CNBr act.) capacity: see data sheet.
- CAN BE COATED ON NITROCELLULÔSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed. 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618. <u>Selected reference of scientific publication in which LO-MG3-13 MAb was used</u> Denis O. et al. Int. Immunol., 1993, 5 (1): 71-78.

For more information, see: Rat Hybridomas and Rat Monoclonal Antibodies. Bazin H. (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF PRODUCT : LO-MG-COC-2

LO-MG-COC-2: Pool of LO-MG1-13 + LO-MG2a-7 + LO-MG2b-2 + LO-MG3-13.

<u>REACTIVITY:</u> Mouse IgG1 (LO-MG1-13), mouse IgG2a (LO-MG2a-7), mouse IgG2b (LO-MG2b-2) and mouse IgG3 (LO-MG3-13) heavy chain of Ig. (See data sheets related to these MAbs).

CLASS OF THIS COCKTAIL: Rat kappa IgG1, allotype IgK-1a

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAN BE LABELLED WITH PEROXIDASE, BIOTIN AND FITC - CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

REFERENCES

See references related to these MAbs.

I. MOUSE MONOCLONAL ANTIBODIES ANTI-RAT IMMUNOGLOBULINS

CODE FOR MOUSE MAb ANTI-RAT IMMUNOGLOBULIN :

 $\underline{MAR "..."-"..."} : \underline{M}ouse \underline{A}nti-\underline{R}at Ig "..." - number "..."$

<u>LO-R "..."-"..."</u> : <u>LO</u>uvain <u>R</u>at - anti-Rat Ig "<u>...</u>" - number "<u>...</u>" 2

MARK-1	MARE-1
MARK-3	MARG1-1
LO-RK1b-1	MARG1-2
LO-RK1b-2	MARG1-5
MARL-15	MARG2a-1
MAR(K+L)	MARG2a-7
MARM-4	MARG2b-3
MARM-7	MARG2b-8
MARD-3	MARG2c-3
MARA-1	MARG2c-5
MARA-2	MARG-COC-1
	MARG-COC-3

II. MOUSE CONTROL IMMUNOGLOBULINS:	
- Mouse MoAb anti-DNP	p.156

III. RAT CONTROL IMMUNOGLOBULINS:	
- Rat MoAb anti-DNP	p.140
- Rat monoclonal (myeloma) immunoglobulins	p.93

MONOCLONAL ANTIBODIES ANTI-RAT IMMUNOGLOBULIN

ANTI-LIGHT CHAIN

MAb	Species of the MAb	Specificity rat	Avidity*	Recommende	ed applications
	and isotype	immunoglobulin	(M-1)	Immunoassay**	Immunopurification
MARK-1	mouse IgG1 kappa	kappa light chain	1 x 10 ⁹	yes	yes
MARK-3	mouse IgG1 kappa	kappa light chain of the	4.3 x 10 ⁹	yes	yes
		IgK-1a allotype			
LO-RK1b-1	rat IgG1 kappa	kappa light chain of the	ND	yes	yes
		IgK-1b allotype			
			ND	yes	yes
LO-RK1b-2	rat IgG1 kappa	kappa light chain of the			
		IgK-1b allotype			
MARL-15	mouse IgG1 kappa	lambda light chain	2.6 x 1010	yes	yes

*See technical data sheet for more details. ND: not determined.

MONOCLONAL ANTIBODIES ANTI-RAT IMMUNOGLOBULIN

ANTI-HEAVY CHAIN

MAb	Species of the MAb	Specificity rat	Specificity rat Avidity* Recor		Avidity* Recommended applications	
	and isotype	immunoglobulin	(M-1)	Immunoassay**	Immunopurification	
MARM-4	mouse IgG1 kappa	mu heavy chain	4 x 10 ⁹	yes	yes	
MARM-7	mouse IgG1 kappa	mu heavy chain	1.1 x 10 ⁹	yes	yes	
MARD-3	mouse IgG1 kappa	delta heavy chain	1.1 x 10 ¹⁰	yes	yes	
MARA-1	mouse IgG1 kappa	alpha heavy chain	1.1 x 10 ¹⁰	yes	yes	
MARA-2	mouse IgG1 kappa	alpha heavy chain	4 x 10 ⁸	yes	no	
MARE-1	mouse IgG1 kappa	epsilon heavy chain	4 x 10 ⁹	yes	yes	
MARG1-1	mouse IgG1 kappa	gamma 1 heavy chain	ND	yes	ND	
MARG1-2	mouse IgG1 kappa	gamma 1 heavy chain	1 x 10 ⁹	yes	Yes	
MARG1-15	mouse IgG1 kappa	gamma 1 heavy chain	ND	ND	ND	
MARG2a-1	mouse IgG1 kappa	gamma 2a heavy chain	2.1 x 10 ⁹	yes	yes	
MARG2a-7	mouse IgG1 kappa	gamma 2a heavy chain	6.2 x 10 ⁹	yes	ND	
MARG2b-3	mouse IgG1 kappa	gamma 2b heavy chain	3 x 10 ⁹	yes	ND	
MARG2b-8	mouse IgG1 kappa	gamma 2b heavy chain	4.7 x 10 ⁹	yes	yes	
MARG2c-3	mouse IgG2a kappa	gamma 2c heavy chain	4.8 x 10 ⁹	yes	yes	
MARG2c-5	mouse IgG2a kappa	gamma 2c heavy chain	5.25 x 10 ⁹	yes	yes	

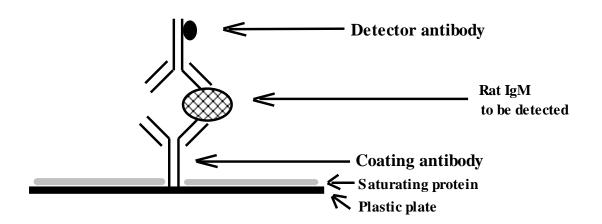
*See technical data sheet for more details. ND: not determined.

	TESTED ON MOUSE IMMUNOGLOBULINS								
MAb	IgM-к IR202	IgD-к IR731	IgА-к IR1060	IgE-к IR162	IgG1-к IR871	IgG1-λ IR31	IgG2a-к IR418	IgG2b-к IR863	IgG2с-к IR1148
MARM-4	3.5 x 10 ⁹								
MARM-7	1.1 x 10 ⁹								
MARD-3		1.1 x 10 ¹⁰							
MARA-1			1.1 x 10 ¹⁰						
MARA-2			4.3 x 10 ⁸						
MARE-1				3.9 x 10 ⁹					
MARG1-1									
MARG1-2					1 x 10 ⁹				
MARG2a-1							2.1 x 10 ⁹		
MARG2a-7							6.2 x 10 ⁹		
MARG2b-3								3.1 x 10 ⁹	
MARG2b-8								4.7 x 10 ⁹	
MARG2c-3							5.25 x 10 ⁹		4.8 x 10 ⁹
MARG2c-5									
MARK-1		1.1 x 10 ⁹							
MARK-3		4.8 x 10 ⁹							
MARL-15						2.6 x 10 ¹⁰			

AVIDITY (1) OF MOUSE MONOCLONAL ANTIBODIES ANTI-RAT IMMUNOGLOBULIN (M⁻¹)

(1) As determined by the technique of Van Heymingen et al. J. Immunol. Methods 1983, 62: 147-153.

DETECTION AND QUANTIFICATION OF $\mathbf{RAT}\ \mathbf{IgM}\ \mathbf{BY}\ \mathbf{ELISA}$



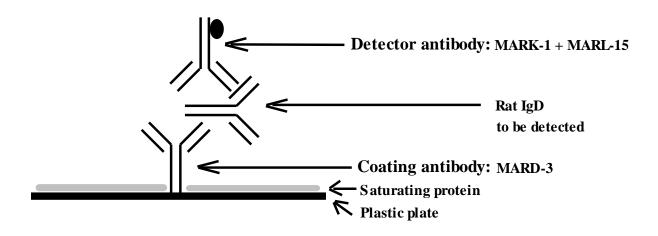
	Sandwich ELISA assays		
	Option 1	Option 2	Option 3
Detector antibodies	MARK-1 + MARL-15	MARK-1 + MARL-15	MARM-4
Capture antibodies	MARM-4	MARM-7	MARM-7
Standards	IR473 or LO-DNP-34		

Option 1 is recommended

Assay conditions

- Coated antibody: MARM-4 or MARM-7 at 5 μg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: MARM-4 or MARK-1 + MARL-15 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable rat IgM concentrations in this assay: $2 \rightarrow 0.03 \ \mu g/ml$

DETECTION AND QUANTIFICATION OF **RAT IgD** BY ELISA

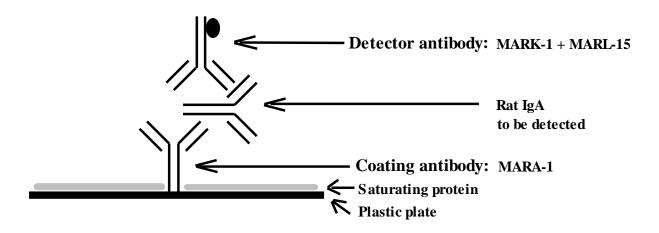


- MARD-3 and MARK-1 + MARL-15 can be used in Sandwich ELISA.
- MARD-3 coats very well on plastic plate.
- Standard: IR504.

- Coated antibody: MARD-3 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: MARK-1 + MARL-15 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable rat IgD concentrations in this assay: $2 \rightarrow 0.03 \ \mu g/ml$

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

DETECTION AND QUANTIFICATION OF RAT IgA by elisa

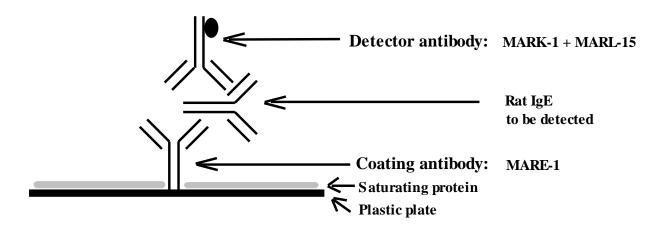


- MARA-1 and MARK-1 + MARL-15 can be used in Sandwich ELISA.
- MARA-1 coats very well on plastic plate.
- Standards: IR22 or LO-DNP-45

- Coated antibody: MARA-1 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: MARK-1 + MARL-15 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable rat IgA concentrations in this assay: $2 \rightarrow 0.03 \ \mu g/ml$

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

DETECTION AND QUANTIFICATION OF **RAT Ige** by Elisa

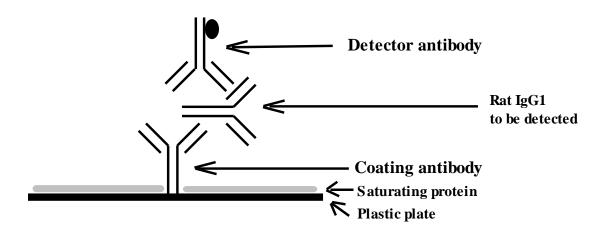


- MARE-1 and MARK-1 + MARL-15 can be used in Sandwich ELISA.
- MARE-1 coats very well on plastic plate.
- Standards: IR2 or IR162 or LO-DNP-30

- Coated antibody: MARE-1 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: MARK-1 + MARL-15 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable rat IgE concentrations in this assay: $2 \rightarrow 0.03 \ \mu g/ml$

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

DETECTION AND QUANTIFICATION OF $RAT \ Ig G1$ by elisa



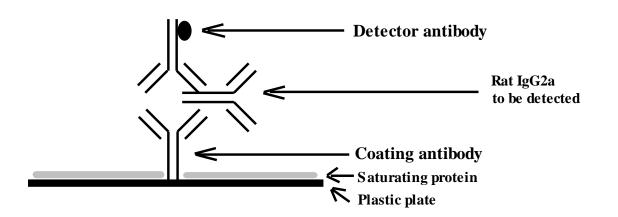
	Sandwich ELISA assays			
	Option 1	Option 2	Option3	
Detector antibodies	MARK-1 + MARL-15	MARK-1 + MARL-15	MARG1-2	
Capture antibodies	MARG1-2	MARG1-1	MARG1-1	
Standards	IR595 or LO-DNP-1 or LO-DNP-2			

Option 1 is recommended

Assay conditions

- Coated antibody: MARG1-2 or MARG1-1 at 5 μg/ml (in a carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: MARG1-2 or MARK-1 + MARL-15 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable rat IgG1 concentrations with this assay: $2 \rightarrow 0.03 \mu$ g/ml

DETECTION AND QUANTIFICATION OF $RAT \ IgG2a$ by elisa



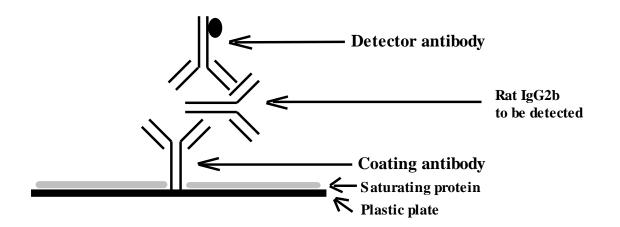
	Sandwich E	LISA assays		
	Option 1 Option 2			
Detector antibodies	MARK-1 + MARL-15	MARG2a-1		
Capture antibodies	MARG2a-7	MARGa-7		
Standards	IR418 or LO-DNP-16			

Option 1 is recommended

Assay conditions

- Coated antibody: MARG2a-7 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: MARG2a-1 or MARK-1 + MARL-15 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable rat IgG2a concentrations in this assay: 2→0.03 µg/ml

$\begin{array}{c} \text{detection and quantification of} \\ \textbf{RAT IgG2b} \hspace{0.1 cm} \text{by elisa} \end{array}$



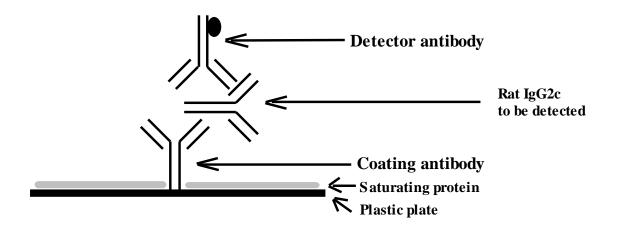
	Sandwich E	LISA assays		
	Option 1 Option 2			
Detector antibodies	MARK-1 + MARL-15	MARG2b-8		
Capture antibodies	MARG2b-3	MARG2b-3		
Standards	IR863 or LO-DNP-57			

Option 1 is recommended

Assay conditions

- Coated antibody: MARG2b-3 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: MARG2b-8 or MARK-1 + MARL-15 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable rat IgG2b concentrations in this assay: 2→0.03 µg/ml

DETECTION AND QUANTIFICATION OF $RAT \ IgG2c$ by elisa



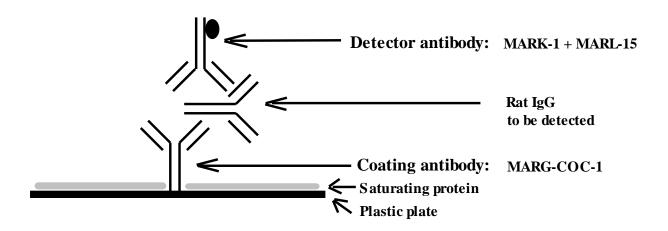
	Sandwich E	Sandwich ELISA assays				
	Option 1	Option 2				
Detector antibodies	MARK-1 + MARL-15	MARG2c-3				
Capture antibodies	MARG2c-5	MARG2c-5				
Standards	IR304 or IR1148					

Option 1 is recommended

Assay conditions

- Coated antibody: MARG2c-5 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: MARG2c-3 or MARK-1 + MARL-15 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)
- Normal range of detectable rat IgG2c concentrations in this assay: 2→0.03 µg/ml

DETECTION AND QUANTIFICATION OF TOTAL RAT IgG by elisa

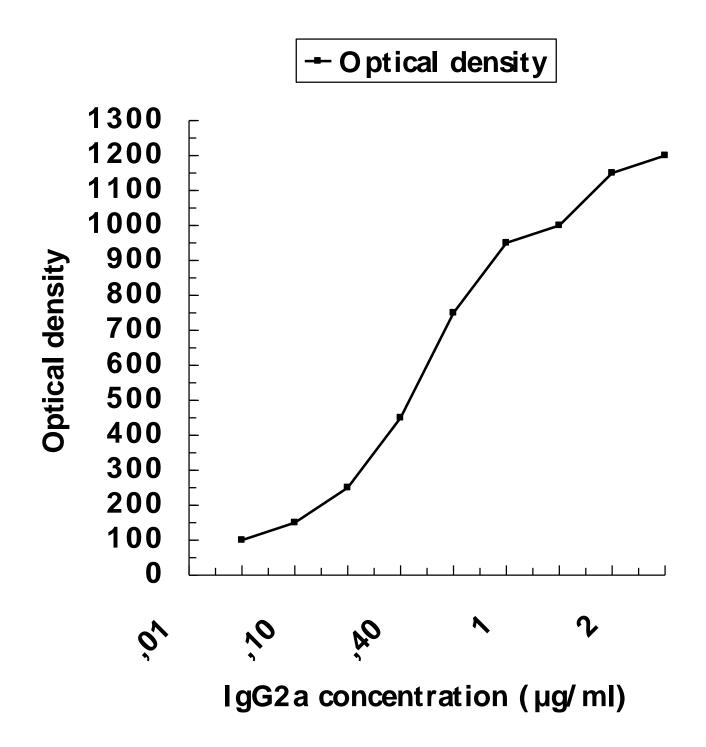


- MARK-1 + MARL-15 can be used in Sandwich ELISA.
- MARG-COC-1 (pool of MARG1-2, MARG2a-7, MARG2b-3, MARG2c-5) coats very well on plastic plate.

- Coated antibody: MARG-COC-1 at 5 µg/ml (in carbonate/bicarbonate buffer pH 9.5)
- Saturating protein: lyophilized skimmed milk or some other proteins
- Detector antibody: MARK-1 + MARL-15 conjugated to peroxidase or biotin and then streptavidin-peroxidase(or any other detection system)

For each batch of monoclonal antibodies, all details of the ELISA controls are given in the quality control sheet.

Rat IgG2a concentration



IMMUNOGEN SUBSTANCE NAME : Kappa L-chain GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARK-1 HYBRIDOMA NAME FOR PRODUCT : MARK-1 MONO Ab ICDB NUMBER: 3032660

<u>REACTIVITY</u>: Rat Kappa light chain of Ig (determined by immunodot)

AVIDITY: on rat IgD kappa: $1 \times 10^9 M^{-1}$ (Cf. avdity sheet, for more details).

<u>**CROSS-REACTIVITY</u>**: MARK-1 does not cross react with human IgG coated in ELISA plate. No specific binding on human platelets.</u>

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of rat Ig of the Kappa type (Solid phase Sepharose 4B CNBr act.)
- CAPTURE ELISA: MEDIUM BINDING ON PLASTICS
- CAN BE LABELLED WITH PEROXIDASE, BIOTIN, FITC AND TRITC
- CAN BE LABELLED WITH IODINE (4) AND ALKALINE PHOSPHATASE
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CANNOT BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE OR FITC

LYOPHILIZATION: Yes.

REFERENCES

Selected references of scientific publications in which MARK-1 MAb was used

Bazin H. et al. J. Immunol. Methods 1984,66:261-269; Bodeus M. et al. J. Immunol. Methods 1985,79:1-6; Khalife J. et al. J. Immunol. 1985,135:2780-2784; Bazin H., Malache J.M. J. Immunol. Meth., 1986, : 19-24; Bazin H. et al. Meth. Enzymol., 1986, 121:638-652; Manouvriez P. et al. Immunobiology 1986, 173, 308-309; Pelletier L. et al. Clin. Exp. Immunol., 1988, 71: 336-342; Castedo M. et al. Int. Immunol. 1993, 5: 1569-1576; Soares M. et al. Transplantation 1993, 56: 1427-1433; Saoudi A. et al. Int. Immunol. 1993, 5: 1559-1567; Vanhove B., Bazin H. Immunology 1993, 79: 580-586; Gmür, R. & Guggenheim, B. J. Dent. Res. 1994, 73: 1421-1428; Reding et al. Transplant Immunol. 1994, 2: 231-237; Lepault F. et al. Eur. J. Immunol. 1995, 25: 1502-1507; Scheringa M. et al., Transplantation 1995, 60: 1350-1353; Soares et al., Transplant. Proc. 1995, 27: 282-285

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : Kappa L-chain of the IgK-1a allotype (1) GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARK-3 HYBRIDOMA NAME FOR PRODUCT : MARK-3 MONO Ab ICDB NUMBER: 3032661

<u>**REACTIVITY</u>** : Rat Kappa light chain of Ig (allotype IgK-1a) (determined by immunodot) CROSS-REACTS WEAKLY IN IMMUNOFLUORESCENCE, ELISA AND RIA WITH RAT IgK-1b KAPPA LIGHT CHAIN OF IMMUNOGLOBULIN.</u>

AVIDITY: on rat kappa 1a IgD: $4.8 \times 10^9 \text{ M}^{-1}$ (Cf. avidity sheet, for more details).

APPLICATIONS : Cf REACTIVITIES

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of rat IgK-1a allotype Ig of the Kappa type (Solid phase Sepharose 4B CNBr act.)
- CAPTURE IN ELISA: GOOD BINDING ON PLASTICS
- CAN BE LABELLED WITH PEROXIDASE, BIOTIN, ALCALINE PHOSPHATASE, FITC AND TRITC
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CANNOT BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY
- LABELLED WITH FITC (NOT GOOD WHEN LABELLED WITH PEROXIDASE)

LYOPHILIZATION: Yes.

REFERENCE

(1) Gutman G.A., Bazin H., Rockhlin C.V. & Nezlin R.S. A standard nomenclature for rat immunoglobulin allotypes. Transpl. Proc. 1983,15:1685-1686

Selected references of scientific publications in which MARK-3 MAb was used

Bazin H. et al. J. Immunol. Meth. 1984,71:9-16

- Bazin H. et al. J. Immunol. Meth. 1984,66:261-269
- Manouvriez P. et al. Immunobiology 1986, 173, 308-309.

Bazin H., Malache J.M. J. Immunol. Meth., 1986, : 19-24.

Manouvriez P. et al. Mol. Immunol., 1985, 22:1201-1208.

Chavez V., et al. Int. Arch. Allergy Immunol., 1992, 97:330-336.

Vanhove B., Bazin H. Immunology 1993, 79: 580-586.

Fernandes I. et al. Brazilian J. Med. Biol. Res. 1994, 27: 2599-2606

Soares et al., Transplant. Proc. 1995, 27: 282-285

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : Kappa L-chain of the IgK-1b allotype (1) GENUS SPECIES : Rattus norvegicus - rat STRAIN : OKA

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (2)

IMMUNOREACTIVE CELL AND PRODUCTS CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-RK1b-1 HYBRIDOMA NAME FOR PRODUCT : LO-RK1b-1 MONO Ab ICDB NUMBER: 3000337

<u>REACTIVITY</u> : Rat Kappa light chain of immunoglobulin of the IgK-1b allotype (determined by immunodot) No cross-reaction with rat kappa light chain of the IgK-1a allotype

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE LABELLED WITH PEROXIDASE
- CAN BE LABELLED WITH BIOTIN
- CAN BE LABELLED WITH FITC
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of Rat IgK-1b Kappa Ig (Solid phase Sepharose 4B CNBr act.) (3)

LYOPHILIZATION: not tested

REFERENCES

(1) Gutman G.A., Bazin H., Rockhlin C.V. & Nezlin R.S. A standard nomenclature for rat immunoglobulin allotypes. Transpl. Proc. 1983,15:1685-1686

(2) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981, Pergamon Press Oxford and N.Y., pp. 615-618
(3) Bazin H. Xhurdebise I. M. Burtonboy G. Lebaca A.M. De Clerca L. & Cormont F. J. Immunol. Bat monoclonal

(3) Bazin H., Xhurdebise L.M., Burtonboy G., Lebacq A.M., De Clercq L. & Cormont F. J. Immunol. Rat monoclonal antibodies.I.Rapid purification from in vitro culture supernatants. Meth. 1984,66:261-269

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : Kappa L-chain of the IgK-1b allotype (1) **GENUS SPECIES** : Rattus norvegicus - rat **STRAIN** : OKA

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (2)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a

NAME FOR CELL LINE : LO-RK1b-2 HYBRIDOMA NAME FOR PRODUCT : LO-RK1b-2 MONO Ab ICDB NUMBER: 3000338

<u>REACTIVITY</u> : Rat Kappa light chain of immunoglobulin of the IgK-1b allotype (determined by immunodot) No cross-reaction with rat kappa light chain of the IgK-1a allotype

APPLICATIONS : Cf REACTIVITY

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of Rat IgK-1b Kappa Ig (Solid phase Sepharose 4B CNBr act.)(3)

- CAN BE LĂBELLED WITH BIOTIN
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE

LYOPHILIZATION: not tested

REFERENCES

1) Gutman G.A., Bazin H., Rockhlin C.V. & Nezlin R.S. A standard nomenclature for rat immunoglobulin allotypes. Transpl. Proc. 1983,15:1685-1686

(2) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981, Pergamon Press Oxford and N.Y., pp. 615-618

(3) Bazin H., Xhurdebise L.M., Burtonboy G., Lebacq A.M., De Clercq L. & Cormont F. Rat monoclonal antibodies.I.Rapid purification from in vitro culture supernatants. J. Immunol. Meth. 1984,66:261-269

- Selected references of scientific publications in which LO-RK1b-2 was used
- Vanhove B., Bazin H. Immunology 1993, 79: 580-586.

Latinne D., et al. Immunol. Rev. 1994, 141: 95-125

Soares et al., Transplant. Proc. 1995, 27: 282-285

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARL-15

IMMUNOGEN SUBSTANCE NAME : Lambda light chain (RH58, IR31) (1,2,3) **GENUS SPECIES** : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : PAI-O (PAI-O is a published cell line of BALB/c origin)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARL-15 HYBRIDOMA NAME FOR PRODUCT : MARL-15 MONO Ab ICDB NUMBER: 3046771

<u>REACTIVITY:</u> Rat lambda light chain of immunoglobulin (determined by immunodot)

AVIDITY: on rat IgG1 lambda: $2.6 \times 10^{10} \text{ M}^{-1}$ (Cf. avidity sheet, for more details).

APPLICATIONS : Cf REACTIVITIES

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH PEROXIDASE
- CAN BE LABELLED WITH FITC AND BIOTIN
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of Rat Ig of the lambda type
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE OR FITC

LYOPHILIZED: not tested

REFERENCES

(1) Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunology 1974,4:44-48

(2) Querinjean P., Bazin H., Starace V., Beckers A., Deckers C. & Heremans J.F. Lambda light chains in rat immunoglobulins. Immunochemistry 1973,10:653-654

(3) Burtonboy G., Bazin H. & Delferrière N. Rat hybridoma antibodies against canine parvovirus. Archives of Virology 1982,71:291-302

<u>Selected references of scientific publications in which MARL-15 MAb was used</u> Soares et al., Transplant. Proc. 1995, 27: 282-285

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MAR(K+L)

MAR(K+L): cocktail of MARK-1 + MARL-15

<u>REACTIVITY:</u> Rat lambda light chain of immunoglobulin Rat kappa light chain of immunoglobulin (determined by immunodot) (See data sheets related to these MoAbs).

CLASS OF THIS COCKTAIL: Mouse kappa IgG1

<u>APPLICATIONS</u> : Cf REACTIVITIES - CAPTURE ELISA: GOOD BINDING ON PLASTICS - CAN BE LABELLED WITH PEROXIDASE, FITC AND BIOTIN - CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

REFERENCES

See references related to these MoAbs.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARM-4

IMMUNOGEN SUBSTANCE NAME : IgM (Polyclonal rat IgM, IR968) (1) GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY (2) CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARM-4 HYBRIDOMA NAME FOR PRODUCT : MARM-4 MONO Ab ICDB NUMBER: 3032665

AVIDITY: on rat IgM: $3.5 \times 10^9 \text{ M}^{-1}$ (Cf. avidity sheet, for more details).

<u>REACTIVITY</u> (2):Rat mu heavy chain of immunoglobulin (determined by immunodot). MARM-4 and MARM-7 do not bind to the same epitope. MARM-4 and MARM-7 label the same percentage of IgM rat splenocytes by fluorocytometric analyses.

<u>CROSS-REACTIVITY</u>: MARM-4 doesn't bind to mouse Ig (every isotype) and rabbit IgG.

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH PEROXIDASE, BIOTIN, TRITC AND FITC
- CANNOT BE USED FOR CELL COUNTING USING A DIRECT METHOD OF IMMUNOFLUORESCENCE
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of rat IgM (solid Sepharose 4B CNBr act.)
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE OR FITC

LYOPHILIZATION: Yes, with a possible low denaturation.

REFERENCES

(1) Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunology, 1974,4:44-48.

(2) Cormont F., Manouvriez P., De Clercq L. & Bazin H. The use of rat monoclonal antibodies to characterize, quantify and purify polyclonal or monoclonal mouse IgM. Meth. in Enzymology, 1986,121,622-631.

Selected references of scientific publications in which MARM-4 MAb was used

Platteau B. et al. Int. J. Radiat. Biol., 1989, 55:14; Soares M. et al. Transplantation Proceedings, 1992,24:451-452; Castedo M. et al. Int. Immunol. 1993, 5: 1569-1576; Soares M. et al. Transplantation 1993, 56: 1427-1433; Vanhove B., Bazin H. Immunology 1993, 79: 580-586; Latinne et al. Immunol. Rev. 1994, 141: 95-125; Reding et al. Transplant Immunol. 1994, 2: 231-237; Soares et al., Transplantation 1994, 57: 1003-1009; Soares et al., Xenotransplantation 1994, 1: 118-124; Soares et al. Transplant. Proc. 1994, 26: 1357-1359; Scheringa M. et al., Transplantation 1995, 60: 1350-1353; Soares et al., Transplant. Proc. 1995, 27: 282-285; Bach,F.H. et al. Nature Medicine 1997, 3: 196-204.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages. FOR RESEARCH ONLY

DESIGNATION OF CELL LINE AND PRODUCT : MARM-7

IMMUNOGEN SUBSTANCE NAME : IgM (IR202, IR968) (1) GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARM-7 HYBRIDOMA NAME FOR PRODUCT : MARM-7 MONO Ab ICDB NUMBER: 3000215

<u>REACTIVITY</u>: Rat mu heavy chain of immunoglobulin (determined by immunodot) MARM-7 and MARM-4 do not bind to the same epitope of the rat mu heavy chains. MARM-4 and MARM-7 label the same percentage of IgM rat splenocytes by fluorocytometric analyses.

AVIDITY: on rat IgM: 1.1 x 10⁹ M⁻¹ Cf. avidity sheet, for more details.

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of rat IgM (Solid phase Sepharose 4B CNBr act.)

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunology, 1974,4:44-48.
<u>Selected references of scientific publications in which MARM-7 MAb was used</u>
Chavez V. et al. Int. Arch. Allergy Immunol., 1992,97:330-336.
Vanhove B., Bazin H. Mol. Immunology, 1992, 29:1-8
Soares M. et al. Transplantation 1993, 56: 1427-1433
Vanhove B., Bazin H. Immunology 1993, 79: 580-586.
Soares M. et al. Transplantation 1994, 57: 1003-1009
Latinne D., et al. Immunol. Rev. 1994, 141: 95-125
Soares M. et al. Xeno 1994, 2: 88-92
Soares et al. Transplant. Proc. 1994, 26: 1357-1359
Van der Werf W.J. et al. Transplant. Proc. 1994, 26: 1372-1373

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARD-3

IMMUNOGEN SUBSTANCE NAME : IgD (IR731) (1) GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARD-3 HYBRIDOMA NAME FOR PRODUCT : MARD-3 MONO Ab ICDB NUMBER: 3032634

<u>REACTIVITY</u>: Rat delta heavy chain of immunoglobulin (determined by immunodot)

AVIDITY: on rat IgD: 1.1 x 10¹⁰M⁻¹ Cf. avidity sheet, for more details.

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAN BE USED FOR IMMUNOPURIFICATION OF RAT IgD PROTEIN (Solid phase Sepharose 4B CNBr act.)
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE LABELLED WITH FITC, TRITC AND BIOTIN
- CAN BE USED IN IMMUNOFLUORESCENCE
- CAPTURE ELISA: GOOD BINDING ON PLASTICS.
- CAN BE USED IN WESTERN BLOT ANALYSIS (denaturated and non denaturated conditions)
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY (purified or labelled with FITC)

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H., Beckers A., Urbain-Vansanten G., Pauwels R., Bruyns C., Tilkin A.F., Platteau B. & Urbain J. Transplantable IgD immunoglobulin- secreting tumours in rats. J. Immunol. 1978,121,2077-2082
<u>Selected references of scientific publications in which MARD-3 MAb was used</u>
Manouvriez P. & Bazin. J. Immunol. 1984,133,3274- 3281
Chavez V. et al. Int. Arch. Allergy Immunol., 1992,97:330-336.
Vanhove B., Bazin H. Mol. Immunology, 1992, 29:1-8
Soares M. et al. Transplantation 1993, 56: 1427-1433
Vanhove B., Bazin H. Immunology 1993, 79: 580-586.
Latinne et al. Immunol. Rev. 1994, 141: 95-125
Soares et al., Transplant. Proc. 1995, 27: 282-285

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARA-1

IMMUNOGEN SUBSTANCE NAME : IgA (IR1060, IR22, IR699) (1) GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARA-1 HYBRIDOMA NAME FOR PRODUCT : MARA-1 MONO Ab ICDB NUMBER: 3042857

<u>REACTIVITY</u> : Rat alpha heavy chain of immunoglobulin (determined by immunodot) Recognizes a conformational epitope in Western Blott. Does not recognize the secretory piece.

<u>AVIDITY:</u> on rat IgA: $1.1 \ge 10^{10} M^{-1}$ Cf. avidity sheet, for more details.

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE LABELLED WITH BIOTIN, PEROXIDASE AND FITC
- CAN BE USED FOR CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE USED IN WESTERN BLOT ANALYSIS (only in non denaturated conditions)
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY (Solid phase Sepharose 4B CNBr act.)
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)

LYOPHILIZATION: Yes, possibly with a low denaturation.

REFERENCE

(1) Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunol. 1974,4:44-48.

Selected references of scientific publications in which MARA-1 MAb was used

Soares et al. Transplantation, 1993, 56: 1427-1433

Vanhove B., Bazin H. Mol. Immunology, 1992, 29:1-8

Vanhove B. & Bazin H. Immunology 1993, 79: 580-586.

Latinne D., et al. Immunol. Rev. 1994, 141: 95-125

Soares et al., Transplant. Proc. 1995, 27: 282-285

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARA-2

IMMUNOGEN SUBSTANCE NAME : IgA (IR1060, IR22, IR699) (1) GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARA-2 HYBRIDOMA NAME FOR PRODUCT : MARA-2 MONO Ab ICDB NUMBER: 3042726

<u>REACTIVITY</u> : Rat alpha heavy chain of immunoglobulin (determined by immunodot)

AVIDITY: on rat IgA: 4.3 x 10⁸M⁻¹ Cf. avidity sheet, for more details.

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN AND PEROXIDASE
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE USED FOR CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE USED IN WESTERN BLOT ANALYSIS : binds to rat IgA in denaturated and non denaturated conditions
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE OR FITC
- CANNOT BE USED FOR IMMUNOPURIFICATION

LYOPHILIZATION: Yes, with a possible low denaturation.

REFERENCE

(1) Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunol. 1974,4:44-48

Selected reference of scientific publication in which MARA-2 MAb was used Bach, F.H. et al. Nature Medicine 1997, 3: 196-204.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARE-1

IMMUNOGEN SUBSTANCE NAME : IgE (IR162, IR410) (1) **GENUS SPECIES** : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARE-1 HYBRIDOMA NAME FOR PRODUCT : MARE-1 MONO Ab ICDB NUMBER: 3032636

<u>REACTIVITY</u>: Rat epsilon heavy chain of immunoglobulin (C epsilon 3) (4) (determined by immunodot)

<u>AVIDITY</u>: On rat IgE: $4 \times 10^9 M^{-1}$ (Cf. avidity sheet, for more details).

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS (2,3,4,5,6)
- CAN BE LABELLED WITH IODINE (2,3), BIOTIN, FITC AND PEROXIDASE
- CAN USED FOR CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE USED IN WESTERN BLOT ANALYSIS: binds to rat IgE in denaturated and non denaturated conditions.
- SUITABLE FOR DEGRANULATION OF RAT MAST CELLS (positive reaction in PCA)
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of Rat IgE (Solid phase Sepharose 4B CNBr act.)
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH FITC

LYOPHILIZATION: Yes, with a possible low denaturation.

REFERENCES

(1) Bazin H., Querinjean P., Beckers A., Heremans J.F. & Dessy F.Transplantable immunoglobulin-secreting tumours in rats.IV.Sixty-three IgE-secreting immunocytoma tumours. Immunology 1974,26:713-723; (2) Manouvriez P., Ravoet A.M. & Bazin H. Fc epsilon receptors on rat B- lymphocytes: specificity and binding kinetics. Mol. Immunology 1985,22:1201-1208; (3) Manouvriez P. & Bazin H. In vivo kinetics and nature of rat IgE- bearing lymphocytes after IgE stimulation. J. Immunol. 1984,133:3274- 3281; (4) Rousseaux-Prevost R., Rousseaux J., Bazin H. Studies of the IgE binding sites to rat mast cell receptor with proteolytic fragments and with a monoclonal antibody directed against epsilon heavy chain: evidence that the combining sites are located in the C epsilon 3 domain. Molecular Immunology 1987, 24, 187-196; (5) Pluschke G. and Bordmann G. Isolation of rat immunoglobulin class switch variants of rat-mouse hybridomas by enzyme-linked immunosorbent assay and sequential sublining. Eur. J. Immunol. 1987, 17, 413-416; (6) Manouvriez P., Lefebvre M., Genart C., Cormont F. & Bazin H. Accurate determination of rat immunoglobulin isotype content in culture supernatants or media by Elisa with mouse monoclonal antibodies. Immunobiology 1986, 173, 307-308.

Selected references of scientific publications in which MARE-1 MAb was used

Manouvriez P.et al. Ann. Inst. Pasteur, 1985, 136C:187-193; Rousseaux-Prevost R., et al. Mol. Immunol., 1987, 24:187-196; Vanhove B., Bazin H. Mol. Immunology, 1992, 29:1-8; Vanhove B., Bazin H. Immunology 1993, 79: 580-586; Yamada M., et al. Immunology 1993, 78 : 298-302; Soares et al., Transplant. Proc. 1995, 27: 282-285; Lima M.C. et al. J. Leukoc. Biol. 1997, 61: 286-292.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages. FOR RESEARCH ONLY

DESIGNATION OF CELL LINE AND PRODUCT : MARG1-1

IMMUNOGEN SUBSTANCE NAME : IgG1 (IR27, IR31) (1) (2) **GENUS SPECIES** : Rattus norvegicus - rat **STRAIN** : LOU/C

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARG1-1 HYBRIDOMA NAME FOR PRODUCT : MARG1-1 MONO Ab ICDB NUMBER:

<u>REACTIVITY</u>: Rat gamma 1 heavy chain of immunoglobulin (determined by ELISA) (2) The specificity of MAbs anti-IgG subclasses is determined in a range of optimal concentrations. Increasing of the first or second antibody up to an inadequate and unnecessary concentration can induce possible cross-reactions with other subclasses.

<u>AVIDITY:</u> on rat IgG1: $1 \times 10^{11} \text{ M}^{-1}$ Cf. avidity sheet, for more details.

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN, PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

LYOPHILIZATION: not tested

REFERENCES

Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunol. 1974,4:44-48
 Querinjean P., Bazin H., Starace V., Beckers A., Deckers C. & Heremans J.F. Lambda light chains in rat immunoglobulins. Immunochemistry 1973,10:653-654

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARG1-2

IMMUNOGEN SUBSTANCE NAME : IgG1 (IR27, IR31) (1) (2) **GENUS SPECIES** : Rattus norvegicus - rat **STRAIN** : LOU/C

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARG1-2 HYBRIDOMA NAME FOR PRODUCT : MARG1-2 MONO Ab ICDB NUMBER: 3003906

<u>REACTIVITY</u>: Rat gamma 1 heavy chain of immunoglobulin (determined by immunodot) (2) The specificity of MAbs anti-IgG subclasses is determined in a range of optimal concentrations. Increasing of the first or second antibody up to an inadequate and unnecessary concentration can induce possible cross-reactions with other subclasses.

AVIDITY: on rat IgG1: 1 x 10⁹M⁻¹ Cf. avidity sheet, for more details.

APPLICATIONS : Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN, FITC, PEROXIDASE
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of rat IgG1 (solid phase Sepharose 4B CNBr act.)
- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE OR FITC

LYOPHILIZATION: not tested

REFERENCES

(1) Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunol. 1974,4:44-48

(2) Querinjean P., Bazin H., Starace V., Beckers A., Deckers C. & Heremans J.F. Lambda light chains in rat immunoglobulins. Immunochemistry 1973,10:653-654

Selected references of scientific publications in which MARG1-2 was used:

Castedo M. et al. Int. Immunology, 1993, 5: 1569-1576; Soares M. et al. Transplantation 1993, 56: 1427-1433; Vanhove B., Bazin H. Mol. Immunology, 1992, 29:1-8; Yamada M., et al. Immunology 1993, 78 : 298-302; Reding et al. Transplant Immunol. 1994, 2: 231-237; Soares et al., Transplant. Proc. 1995, 27: 282-285; Bach, F.H. et al. Nature Medicine 1997, 3: 196-204.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARG1-5

IMMUNOGEN SUBSTANCE NAME : IgG1 (IR27, IR31) (1) (2) **GENUS SPECIES** : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARG1-5 HYBRIDOMA NAME FOR PRODUCT : MARG1-5 MONO Ab

<u>REACTIVITY</u> : Rat gamma 1 heavy chain of immunoglobulin (determined by immunodot) (2) The specificity of MAbs anti-IgG subclasses is determined in a range of optimal concentrations. Increasing of the first or second antibody up to an inadequate and unnecessary concentration can induce possible cross-reactions with other subclasses.

APPLICATIONS : Cf REACTIVITY

LYOPHILIZATION: not tested

REFERENCES

(1) Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunol. 1974,4:44-48

(2) Querinjean P., Bazin H., Starace V., Beckers A., Deckers C. & Heremans J.F. Lambda light chains in rat immunoglobulins. Immunochemistry 1973,10:653-654

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARG2a-1

IMMUNOGEN

SUBSTANCE NAME : IgG2a (Polyclonal antibodies anti horse spleen ferritin, IR33 (1,2) GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMUNOCYTE DONOR

GENUS SPECIES : Mus musculus - mouse **STRAIN** : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : PAI-O (PAI-O IS A PUBLISHED CELL LINE of BALB/c ORIGIN)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARG2a-1 HYBRIDOMA NAME FOR PRODUCT : MARG2a-1 MONO Ab ICDB NUMBER: 3003907

AVIDITY: on rat IgG2a: 2.1 x 10⁹M⁻¹ Cf. avidity sheet, for more details.

<u>REACTIVITY</u> : Rat gamma 2a heavy chain of immunoglobulin (determined by immunodot) (2) The specificity of MAbs anti-IgG subclasses is determined in a range of optimal concentrations. Increasing of the first or second antibody up to an inadequate and unnecessary concentration can induce possible cross-reactions with other subclasses.

APPLICATIONS : Cf REACTIVITIES

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of Rat IgG2a (Solid phase Sepharose 4B CNBr act.)
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE LABELLED WITH BIOTIN, PEROXIDASE
- CAPTURE ELISA: WEAK BINDING ON PLASTICS
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE OR FITC
- CANNOT BE FROZEN AND THAWED MANY TIMES. SUSCEPTIBLE TO BE DENATURED BY SUCH A TREATMENT.

LYOPHILIZATION: Yes, with a possible low denaturation.

REFERENCES

(1) Bazin H., Beckers A., Deckers C. & Moriame M. Transplantable immunoglobulin-secreting tumours in rats.V.Monoclonal immunoglobulins secreted by 250 ileocecal immunocytomas in the LOU/Wsl rats. J. Nat. Cancer Inst. 1973,51:1359-1361

(2) Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunology 1974,4:44-48

Selected references of scientific publications in which MARG2a-1 was used:

Castedo M. et al. Int. Immunology, 1993, 5: 1569-1576;Soares M. et al. Transplantation 1993, 56: 1427-1433;Vanhove B., Bazin H. Mol. Immunology, 1992, 29:1-8;Reding et al. Transplant Immunol. 1994, 2: 231-237;Routledge E.G. et al. Transplantation 1995, 60: 847-853;Soares et al., Transplant. Proc. 1995, 27: 282-285; Bach,F.H. et al. Nature Medicine 1997, 3: 196-204.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARG2a-7

IMMUNOGEN

SUBSTANCE NAME: IgG2a (Polyclonal antibodies anti horse spleen ferritin, IR33 (1,2) **GENUS SPECIES** : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMUNOCYTE DONOR

GENUS SPECIES : Mus musculus - mouse **STRAIN** : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : PAI-O (PAI-O IS A PUBLISHED CELL LINE of BALB/c ORIGIN)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARG2a-7 HYBRIDOMA NAME FOR PRODUCT : MARG2a-7 MONO Ab ICDB NUMBER: 3000191

AVIDITY: on rat IgG2a: $6.2 \times 10^9 M^{-1}$ (Cf. avidity sheet, for more details).

<u>REACTIVITY</u> : Rat gamma 2a heavy chain of immunoglobulin (determined by immunodot) The specificity of MAbs anti-IgG subclasses is determined in a range of optimal concentrations. Increasing of the first or second antibody up to an inadequate and unnecessary concentration can induce possible cross-reactions with other subclasses.

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE LABELLED WITH BIOTIN, PEROXIDASE AND FITC
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)

LYOPHILIZATION: Yes, possibly with a low denaturation.

REFERENCES

(1) Bazin H., Beckers A., Deckers C. & Moriame M. Transplantable immunoglobulin-secreting tumours in rats.V.Monoclonal immunoglobulins secreted by 250 ileocecal immunocytomas in the LOU/Wsl rats. J. Nat. Cancer Inst. 1973,51:1359-1361

(2) Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunology 1974,4:44-48

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARG2b-3

IMMUNOGEN SUBSTANCE NAME : IgG2b (IR863) (1) GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY (2,3) CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARG2b-3 HYBRIDOMA NAME FOR PRODUCT : MARG2b-3 MONO Ab ICDB NUMBER: 3000195

<u>REACTIVITY</u>: Rat gamma 2b heavy chain of immunoglobulin (determined by immunodot) The specificity of MAbs anti-IgG subclasses is determined in a range of optimal concentrations. Increasing of the first or second antibody up to an inadequate and unnecessary concentration can induce possible cross-reactions with other subclasses.

AVIDITY: on rat IgG2b: $3 \times 10^9 M^{-1}$ (Cf. avidity sheet, for more details).

APPLICATIONS: Cf. REACTIVITIES (4)

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE LABELLED WITH BIOTIN, PEROXIDASE AND FITC
- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE OR FITC
- CANNOT BE FROZEN AND THAWED MANY TIMES. SUSCEPTIBLE TO BE DENATURATED BY SUCH A TREATMENT.

LYOPHILIZATION: not tested

REFERENCES

(1) Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunology 1974,4:44-48

(2) Pluschke G. and Bordmann G. Isolation of rat immunoglobulin class switch variants of rat-mouse hybridomas by enzyme-linked immunosorbent assay and sequential sublining. Eur. J. Immunol. 1987, 17, 413-416

(3) Manouvriez P., Lefebvre M., Genart C., Cormont F. & Bazin H. Accurate determination of rat immunoglobulin isotype content in culture supernatants or media by Elisa with mouse monoclonal antibodies. Immunobiology 1986, 173, 307-308.

(4) Bazin H., Malache JM. Rat (and mouse) monoclonal antibodies. V. A simple automated technique of antigen purification by immunoaffinity chromatography. J. Immunol. Meth., 1986, 88:19-24

Selected references of scientific publications in which MARG2b-3 was used:

Soares et al., Transplant. Proc. 1995, 27: 282-285

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARG2b-8

IMMUNOGEN SUBSTANCE NAME : IgG2b (IR863) (1) GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG1 NAME FOR CELL LINE : MARG2b-8 HYBRIDOMA NAME FOR PRODUCT : MARG2b-8 MONO Ab ICDB NUMBER: 3032652

<u>REACTIVITY</u>: Rat gamma 2b heavy chain of immunoglobulin (determined by immunodot) The specificity of MAbs anti-IgG subclasses is determined in a range of optimal concentrations. Increasing of the first or second antibody up to an inadequate and unnecessary concentration can induce possible cross-reactions with other subclasses.

AVIDITY: on rat IgG2b: 4.7 x 10^9 M⁻¹ (Cf. avidity sheet, for more details).

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: WEAK BINDING ON PLASTICS

- CAN BE LABELLED WITH PEROXIDASE, AND BIOTIN
- CANNOT BE LABELLED WITH FITC
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS (2,3)
- CROSS-REACTS NON SPECIFICALLY WITH NEARLY 15% OF HUMAN LYMPHOCYTES (as detected by FACScan) AND WITH HUMAN MONOCYTES (> 35%)
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of rat IgG2b (Solid phase Sepharose 4B CNBr act.)
- CANNOT BE COATED ON NITROCELLULOSE (DOT-ELISPOT)

LYOPHILIZATION: Yes, with a possible low denaturation.

REFERENCES

(1) Bazin H., Beckers A. & Querinjean P. Three classes and four subclasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunology 1974,4:44-48

(2) Pluschke G. and Bordmann G. Isolation of rat immunoglobulin class switch variants of rat-mouse hybridomas by enzyme-linked immunosorbent assay and sequential sublining. Eur. J. Immunol. 1987, 17, 413-416

(3) Manouvriez P., Lefebvre M., Genart C., Cormont F. & Bazin H. Accurate determination of rat immunoglobulin isotype content in culture supernatants or media by Elisa with mouse monoclonal antibodies. Immunobiology 1986, 173, 307-308.

Selected references of scientific publications in which MARG2b-8 MAb was used

Castedo M. et al. Int. Immunology 1993, 5: 1569-1576; Soares M. et al. Transplantation, 1993, 56: 1427-1433; Vanhove B., Bazin H. Mol. Immunology, 1992, 29:1-8; Reding et al. Transplant Immunol. 1994, 2: 231-237; Bach,F.H. et al. Nature Medicine 1997, 3: 196-204.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARG2c-3

IMMUNOGEN SUBSTANCE NAME : IgG2c (IR304) (1) **GENUS SPECIES** : Rattus norvegicus - rat **STRAIN** : LOU/C

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG2a NAME FOR CELL LINE : MARG2c-3 HYBRIDOMA NAME FOR PRODUCT : MARG2c-3 MONO Ab ICDB NUMBER: 3000205

<u>REACTIVITY</u>: Rat gamma 2c heavy chain of immunoglobulin (determined by immunodot) The specificity of MAbs anti-IgG subclasses is determined in a range of optimal concentrations. Increasing of the first or second antibody up to an inadequate and unnecessary concentration can induce possible cross-reactions with other subclasses.

AVIDITY: On rat IgG2c: $4.8 \times 10^9 M^{-1}$ (Cf. avidity sheet for more details).

APPLICATIONS: Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE LABELLED WITH PEROXIDASE, FITC AND BIOTIN
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS (2,3)
- CANNOT BE FROZEN AND THAWED MANY TIMES. SUSCEPTIBLE TO BE
- DENATURATED BY SUCH A TREATMENT
- CANNOT BE COATED ON NITROCELLULOSE (DOT-ELISPOT)

LYOPHILIZATION: not tested

REFERENCES

(1) Bazin H., Beckers A. & Querinjean P. Three classes and four sublcasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunol. 1974,4:44-48

(2) Pluschke G. and Bordmann G.. Isolation of rat immunoglobulin class switch variants of rat-mouse hybridomas by enzyme-linked immunosorbent assay and sequential sublining. Eur. J. Immunol. 1987, 17, 413-416

(3) Manouvriez P., Lefebvre M., Genart C., Cormont F. & Bazin H. Accurate determination of rat immunoglobulin isotype content in culture supernatants or media by Elisa with mouse monoclonal antibodies. Immunobiology 1986, 173, 307-308.

<u>Selected references of scientific publications in which MARG2c-3 MAb was used</u> Castedo M. et al. Int. Immunology 1993, 5: 1569-1576

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : MARG2c-5

IMMUNOGEN SUBSTANCE NAME : IgG2c (IR304) (1) **GENUS SPECIES** : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMUNOCYTE DONOR GENUS SPECIES : Mus musculus - mouse STRAIN : BALB/c

IMMORTAL CELL PARTNER DESIGNATION : Sp2/O

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Mouse kappa IgG2a NAME FOR CELL LINE : MARG2c-5 HYBRIDOMA NAME FOR PRODUCT : MARG2c-5 MONO Ab ICDB NUMBER: 3070308.

<u>REACTIVITY</u>: Rat gamma 2c heavy chain of immunoglobulin (determined by immunodot) The specificity of MAbs anti-IgG subclasses is determined in a range of optimal concentrations. Increasing of the first or second antibody up to an inadequate and unnecessary concentration can induce possible cross-reactions with other subclasses.

AVIDITY: On rat IgG2c: $5.25 \times 10^9 M^{-1}$ (Cf. avidity sheet for more details).

APPLICATIONS: Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH BIOTIN AND FITC

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS (2,3)

- CAN BE COATED ON NITROCELLULOSE (DOT-ELISPOT)

- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY (purified)

LYOPHILIZATION: not tested

REFERENCES

(1) Bazin H., Beckers A. & Querinjean P. Three classes and four sublcasses of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur. J. Immunol. 1974,4:44-48

(2) Pluschke G. and Bordmann G. Isolation of rat immunoglobulin class switch variants of rat-mouse hybridomas by enzyme-linked immunosorbent assay and sequential sublining. Eur. J. Immunol. 1987, 17, 413-416

(3) Manouvriez P., Lefebvre M., Genart C., Cormont F. & Bazin H. Accurate determination of rat immunoglobulin isotype content in culture supernatants or media by Elisa with mouse monoclonal antibodies. Immunobiology 1986, 173, 307-308.

Selected references of scientific publications in which MARG2c-5 MAb was used

Latinne D., et al. Immunol. Rev. 1994, 141: 95-125

Soares et al., Transplant. Proc. 1995, 27: 282-285

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF PRODUCT : MARG-COC-1

MARG-COC-1: Pool of MARG1-2, MARG2a-7, MARG2b-3, MARG2c-5

<u>REACTIVITY</u>: Rat IgG1 (MARG1-2), rat IgG2a (MARG2a-7), rat IgG2b (MARG2b-3) and rat IgG2c (MARG2c-5) heavy chain of Ig. (See data sheets related to these MAbs).

APPLICATIONS : Cf REACTIVITY - CAN BE LABELLED WITH PEROXIDASE - CAN BE LABELLED WITH BIOTIN - CAN BE LABELLED WITH FITC - CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

REFERENCES

See references related to these MAbs.

DESIGNATION OF PRODUCT : MARG-COC-3

MARG-COC-3: Pool of MARG1-5, MARG2a-7, MARG2b-3, MARG2c-5

<u>REACTIVITY</u>: Rat IgG1 (MARG1-5), rat IgG2a (MARG2a-7), rat IgG2b (MARG2b-3) and rat IgG2c (MARG2c-5) heavy chain of Ig. (See data sheets related to these MAbs).

<u>APPLICATIONS</u> : Cf REACTIVITY

REFERENCES

See references related to these MAbs.

NORMAL RAT SERUM - Ig titrated

BATCH NUMBER: SRNW4.

POOL OF SERA FROM DIFFERENT STRAINS OF RAT

WISTAR, OKA, BN, FISHER, LEWIS, AxC, PVG/c, LOU/C, LOU/C.IgK-1b(OKA).

Reconstitute the freeze-dried control rat serum by adding 0.5 ml distilled water to each vial, mix and allow to dissolve completely and homogenize. Reconstituted controls are stable when kept at -20°C.

CONCENTRATION OF

IgM	1.02 mg/ml
IgA	0.12 mg/ml
IgG1	1.51 mg/ml
IgG2a	7.74 mg/ml
IgG2b	3.63 mg/ml
IgG2c	1.95 mg/ml

Avoid multiple freezing-thawing cycles.

LOU RAT IMMUNOCYTOMA (PLASMACYTOMA) IMMUNOGLOBULINS

Immunocytoma immunoglobulin	Isotype	Antigen binding specificity	
IR202*(1)	IgM kappa	Unknown	
IR473°(1,8)	IgM kappa	Autoantibodies anti-rat γ1	
IR22*(1,2,3,4)	IgA kappa	Autoantibodies anti-rat γ1	
IR1060°(1,2,3,4)	IgA kappa	Unknown	
IR2°(2,4,5)	IgE kappa	Unknown	
IR162*(1,4,5)	IgE kappa	Unknown	
IR595* ⁽⁷⁾	IgG1 kappa	Unknown	
IR871°	IgG1 kappa	Unknown	
IR27°(2,4)	IgG1 kappa	Unknown	
IR31*(2,6)	IgG1 lambda	Unknown	
IR418*(7,9)	IgG2a kappa	Unknown	
IR452°	IgG2a kappa	Unknown	
IR863*	IgG2b kappa	Unknown	
IR304°	IgG2c kappa	Unknown	
IR1148*	IgG2c kappa	Unknown	

**Currently produced (short delay).* °*Produced upon request.*

References

For all IR: Rat Hybridomas and Rat Monoclonal Antibodies, H. Bazin (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages; (1) J. Natl. Cancer Inst. 1973, 51: 1359; (2) Eur. J. Immunol. 1974, 4: 44; (3) J. Immunol. 1974, 112: 1035; (4) Immunology 1974, 26: 713; (5) Immunology 1993, 79: 580; (6) Immunochemistry 1973, 10: 653; (7) Transplantation 1993, 56: 1427; (8) Transplantation 1995, 60: 1350; (9) Eur. J. Immunol. 1995, 25: 1502.

RAT MONOCLONAL ANTIBODIES ANTI-HUMAN IMMUNOGLOBULINS

CODE FOR RAT MAb ANTI-HUMAN IMMUNOGLOBULIN:

<u>LO-H''...''</u> : <u>LO</u>uvain rat <u>-</u> anti-<u>h</u>uman Ig "<u>...</u>" <u>-</u> : number "<u>...</u>"

LO-hK-3
LO-hL-2
LO-hM-2
LO-hM-7
LO-hM-18
LO-hD-11
LO-hE-10
LO-hE-17
LO-hA-8
LO-hA-9
LO-hG-20
LO-hG-22
LO-hG-24

RAT MONOCLONAL ANTIBODIES ANTI-HUMAN IMMUNOGLOBULIN

ANTI-LIGHT CHAIN

MAb	Species of the MAb Specificity human		Avidity*	Recommended applications	
	and isotype	immunoglobulin	(M-1)	Immunoassay**	Immunopurification
LO-hK-3	rat IgG1 kappa	kappa light chain	4.1 x 10 ⁸	yes	yes
LO-hL-2	rat IgG1 kappa	lambda light chain	1.5 x 10 ¹⁰	yes	yes

ANTI-HEAVY CHAIN

MAb	Species of the MAb	Specificity human	Avidity*	Recommended applications		
	and isotype	immunoglobulin	(M-1)	Immunoassay**	Immunopurification	
LO-hM-2	rat IgG1 kappa	mu heavy chain	ND	yes	yes	
LO-hM-7	rat IgM kappa	mu heavy chain	2.9 x 10 ⁹	yes	yes	
LO-hM-18	rat IgG1 kappa	mu heavy chain	ND	yes	ND	
LO-hD-11	rat IgG1 kappa	delta heavy chain	2 x 10 ⁹	yes	ND	
LO-hE-10	rat IgG1 kappa	epsilon heavy chain	5.9 x 10 ⁹	yes	ND	
LO-hE-17	rat IgG1 kappa	epsilon heavy chain	2.2 x 10 ⁹	yes	ND	
LO-hA-8	rat IgG1 kappa	alpha heavy chain	1.9 x 10 ⁹	yes	ND	
LO-hA-9	rat IgG2a kappa	alpha 1 and 2 heavy chains	$5.0 \ge 10^8$	yes	yes	
LO-hG-20	rat IgM kappa	gamma heavy chain	1.4 x 10 ⁹	yes	yes	
LO-hG-22	rat IgG2c kappa	gamma heavy chain	2.7 x 10 ⁸	yes	yes	
LO-hG-24	rat IgG2c kappa	gamma heavy chain	$1.1 \ge 10^{10}$	yes	ND	

*See technical data sheet for more details/**See technical data sheet for labelling properties/ND: not determined.

AVIDITY(1) OF RAT MONOCLONAL ANTIBODIES ANTI-HUMAN IMMUNOGLOBULIN (M⁻¹)

Tested on human isotype proteins	IgM	IgD	IgE	IgA	IgG	Ig lambda	Ig kappa
LO-hK-3							4.1 x 10 ⁸
LO-hL-2						1.5 x 10 ¹⁰	
LO-hM-2							
LO-hM-7	2.9 x 10 ⁹						
LO-hM-18							
LO-hD-11		2 x 10 ⁹					
LO-hE-10			5.9 x 10 ⁹				
LO-hE-17			2.2 x 10 ⁹				
LO-hA-8				1.9 x 10 ⁹			
LO-hA-9				5 x 10 ⁸			
LO-hG-20					1.4 x 10 ⁹		
LO-hG-22					2.7 x 10 ⁸		
LO-hG-24					1.7 x 10 ⁹		

(1) As determined by the techniques of Van Heymingen et al. J. Immunol. Methods 1983, 62: 147-153.

TECHNIQUE OF PURIFICATION OF HUMAN Ig BY IMMUNOAFFINITY CHROMATOGRAPHY

"X" ml of serum or cell culture supernatant are applied at a rate of about 2 ml/min at room temperature to a column of Sepharose-4B (Pharmacia, Belgium) on which "Y" mg of rat MAb anti-human Ig has been immobilized. The column is washed with 100 ml of phosphate buffered saline (PBS), then 100 ml of PBS containing 2.5 M NaCl, and then again at normal salinity with 100 ml PBS. Human immunoglobulins are eluted by decreasing the pH with Glycine/HCl 0.1 M + 0.15 M NaCl buffer at pH 2.8*. The eluate fractions are neutralized as rapidly as possible after the elution with NaOH buffer (O.1 M, pH 8.6) (Bazin et al., 1986; Bazin and Malache, 1986).

REFERENCES

BAZIN H., CORMONT F., DE CLERCQ L. Purification of rat monoclonal antibodies. Meth. in Enzymol., 1986, 121, 638-652.

BAZIN H., MALACHE J.M. Rat (and mouse) monoclonal antibodies. V. A simple automated technique of antigen purification by immunoaffinity chromatography. J. Immunol. Methods, 1986, 88, 19-24.

*Depending on the rat monoclonal antibodies, the pH of the eluting buffer could be from pH 2.8 to pH 4.5.

DESIGNATION OF CELL LINE AND PRODUCT : LO-hK-3

IMMUNOGEN SUBSTANCE NAME : Purified Human Ig GENUS SPECIES : Homo sapiens - HUMAN

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-hK-3 HYBRIDOMA NAME FOR PRODUCT : LO-hK-3 MONO Ab ICDB NUMBER: 3042850

<u>REACTIVITY</u>: Human kappa light chain of immunoglobulin

AVIDITY: on human kappa myeloma protein: $4.1 \times 10^8 M^{-1}$

CROSS-REACTIVITY

Does not cross-react with guinea pig, chicken, rabbit, goat, sheep, cow, horse, dog, swine, baboon immunoglobulins. Does not cross-react with mouse Ig (ELISA test). Well reacts with the non denaturated and denaturated kappa light chain.

APPLICATIONS : Cf REACTIVITY

- CAN BE USED FOR CAPTURE ELISA (GOOD BINDING ON PLASTICS)

- CAN BE LABELLED WITH FITC, BIOTIN and PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE USED TO DETECT MEMBRANE KAPPA Ig ON HUMAN B LYMPHOCYTES

- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of Human Ig Kappa (Solid phase Sepharose 4B CNBr act.)

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot.
 Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618
 <u>Selected reference of scientific publication in which LO-hK-3 was used</u>
 Vanhove B., Bach F.H. Transplantation 1993, 56: 1251-1292

"Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-hL-2

IMMUNOGEN SUBSTANCE NAME : Purified Human lambda immunoglobulin **GENUS SPECIES** : Homo sapiens -human

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-hL-2 HYBRIDOMA NAME FOR PRODUCT : LO-hL-2 MONO Ab ICDB NUMBER: 3042853

<u>REACTIVITY</u>: Human lambda light chain of immunoglobulin

AVIDITY : on human lambda myeloma protein: 5.1 x 10¹⁰M⁻¹

CROSS-REACTIVITY

Does not cross-react with guinea pig, chicken, rabbit, goat, sheep, cow, horse, dog, swine immunoglobulin. Does not cross-react with mouse Ig. Cross-reacts with baboon immunoglobulins (ELISA test).

APPLICATIONS : Cf REACTIVITY

- CAN BE USED FOR CAPTURE ELISA (GOOD BINDING ON PLASTICS)
- CAN BE LABELLED WITH FITC, BIOTIN and PEROXIDASE
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE USED TO DETECT MEMBRANE Ig LAMBDA ON HUMAN LYMPHOCYTES
- CAN BE USED IN WESTERN BLOT ANALYSIS.
- BINDS FREE LAMBDA LIGHT CHAIN AS WELL AS COMPLETE LAMBDA IMMUNOGLOBULIN MOLECULES.
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of human Ig lambda (Solid phase Sepharose 4B CNBr act.)

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot.
 Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618
 <u>Selected reference of scientific publication in which LO-hL-2 was used</u>
 Vanhove B., Bach F.H. Transplantation 1993, 56: 1251-1292

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-hM-2

IMMUNOGEN SUBSTANCE NAME : Purified Human IgM GENUS SPECIES : Homo sapiens -human

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-hM-2 HYBRIDOMA NAME FOR PRODUCT : LO-hM-2 MONO Ab ICDB NUMBER: still not attributed

<u>REACTIVITY</u>: Human mu heavy chain of immunoglobulin.

CROSS-REACTIVITY

Does cross-react with baboon Ig (ELISA test).

APPLICATIONS : Cf REACTIVITY

- CAN BE USED FOR CAPTURE ELISA (GOOD BINDING ON PLASTICS)

- CAN BE LABELLED WITH FITC AND PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAN DETECT MEMBRANE IgM ON HUMAN B LYMPHOCYTES

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-hM-7

IMMUNOGEN SUBSTANCE NAME : Purified Human IgM GENUS SPECIES : Homo sapiens -human

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgM, allotype IgK-1a NAME FOR CELL LINE : LO-hM-7 HYBRIDOMA NAME FOR PRODUCT : LO-hM-7 MONO Ab

ICDB NUMBER: 3046707

<u>REACTIVITY</u>: Human mu heavy chain of immunoglobulin.

AVIDITY: on human IgM monoclonal myeloma protein: 2.9 x 10⁹M⁻¹

CROSS-REACTIVITY

Does not cross-react with mouse Ig and chicken, rabbit, goat, sheep, bovine, horse, dog IgG. Cross-reacts with baboon Ig (ELISA test).

APPLICATIONS : Cf REACTIVITY

- CAN BE USED FOR CAPTURE ELISA (GOOD BINDING ON PLASTICS)
- CAN BE LABELLED WITH BIOTIN and PEROXIDASE
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN DETECT MEMBRANE IgM ON HUMAN B LYMPHOCYTES
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of Human IgM (Solid phase Sepharose 4B CNBr act.)
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH PEROXIDASE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot.
 Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618
 <u>Selected reference of scientific publication in which LO-hM-7 was used</u>
 Vanhove B., Bach F.H. Transplantation 1993, 56: 1251-1292
 Latinne D. et al. Immunol. Rev. 1994, 141: 95-125

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-hM-18

IMMUNOGEN

SUBSTANCE NAME : Purified polyclonal Human IgM **GENUS SPECIES** : Homo sapiens -human

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER

DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-hM-18 HYBRIDOMA NAME FOR PRODUCT : LO-hM-18 MONO Ab ICDB NUMBER:

<u>REACTIVITY</u>: Human mu heavy chain of immunoglobulin.

CROSS-REACTIVITY

Does not cross-react with baboon IgG and mouse Ig (ELISA test).

APPLICATIONS : Cf REACTIVITY

- CAN BE USED FOR CAPTURE ELISA (GOOD BINDING ON PLASTICS)

- CAN BE LABELLED WITH BIOTIN and PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-hD-11

IMMUNOGEN SUBSTANCE NAME : Purified Human IgD GENUS SPECIES : Homo sapiens -human

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-hD-11 HYBRIDOMA NAME FOR PRODUCT : LO-hD-11 MONO Ab ICDB NUMBER: 3046702

<u>REACTIVITY</u>: Human delta heavy chain of immunoglobulin.

AVIDITY: on human IgD monoclonal myeloma protein: 2 x 10⁹M⁻¹

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH BIOTIN and PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAN BE USED TO DETECT MEMBRANE IgD ON HUMAN B LYMPHOCYTES

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-hE-17

IMMUNOGEN SUBSTANCE NAME : Purified Human IgE **GENUS SPECIES** : Homo sapiens -human

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-hE-17 HYBRIDOMA NAME FOR PRODUCT : LO-hE-17 MONO Ab ICDB NUMBER: 3046704

<u>REACTIVITY</u>: Human epsilon heavy chain of immunoglobulin. LO-hE-10 and LO-hE-17 do not bind to the same epitope.

AVIDITY : on human IgE monoclonal myeloma protein: 2.2x10⁹M⁻¹

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH BIOTIN, FITC AND PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-hA-8

IMMUNOGEN SUBSTANCE NAME : Purified Human IgA GENUS SPECIES : Homo sapiens -human

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-hA-8 HYBRIDOMA NAME FOR PRODUCT : LO-hA-8 MONO Ab ICDB NUMBER: 3046700

<u>REACTIVITY</u>: Human alpha 1 heavy chain of immunoglobulin.

AVIDITY : on human IgA lambda BRAI monoclonal myeloma protein: 1.9x10⁹M⁻¹

CROSS-REACTIVITY:

Does not cross-react with guinea pig, chicken, rabbit, goat, sheep, pig, cow, horse, dog, swine Ig (ELISA test).

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH BIOTIN, FITC and PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAN DETECT MEMBRANE IgA ON HUMAN B LYMPHOCYTES

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-hA-9

<u>IMMUNOGEN</u>

SUBSTANCE NAME : Purified Human IgA **GENUS SPECIES** : Homo sapiens -human

<u>IMMUNOCYTE DONOR</u> GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE : LO-hA-9 HYBRIDOMA NAME FOR PRODUCT : LO-hA-9 MONO Ab ICDB NUMBER: 3046701

<u>REACTIVITY</u>: Human alpha 1 and alpha 2 heavy chain of immunoglobulin.

CROSS-REACTIVITY:

Does not cross-react with guinea pig, chicken, rabbit, goat, sheep, pig, cow, horse, dog, swine Ig. Does not cross-react with mouse Ig (ELISA test).

<u>AVIDITY</u>: on human IgA lambda BRAI monoclonal myeloma protein: $5 \ge 10^8 M^{-1}$

APPLICATIONS : Cf REACTIVITIES

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH BIOTIN AND PEROXIDASE
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN DETECT MEMBRANE IgA ON HUMAN LYMPHOCYTES
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of human IgA (Solid phase Sepharose 4B CNBr act.)

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-hG-20

IMMUNOGEN SUBSTANCE NAME : Purified Human IgG **GENUS SPECIES** : Homo sapiens -human

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgM, allotype IgK-1a NAME FOR CELL LINE : LO-hG-20 HYBRIDOMA NAME FOR PRODUCT : LO-hG-20 MONO Ab ICDB NUMBER: 3046705

<u>REACTIVITY</u>: Human gamma heavy chain of immunoglobulin (4 subclasses)

CROSS-REACTIVITY

Does not cross-react with guinea pig, chicken, sheep, dog, swine Ig. Cross-reacts with rabbit IgG (ELISA test).

AVIDITY: on human polyclonal IgG: 1.4x10⁹ M⁻¹

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: MIDDLE BINDING ON PLASTICS

- CAN BE LABELLED WITH BIOTIN, FITC AND PEROXIDASE.
- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CANNOT DETECT MEMBRANE IgG ON HUMAN LYMPHOCYTES
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY FOR PURIFICATION OF HUMAN IgG (solid phase Sepharose 4B CNBr act.)
- CAN BE USED TO REVEAL IgG ANTIBODY BINDING ON CELLS BY
- IMMUNOFLUORESCENCE (FLOW CYTOMETRY)

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

DESIGNATION OF CELL LINE AND PRODUCT : LO-hG-22

IMMUNOGEN SUBSTANCE NAME : Purified Human IgG **GENUS SPECIES** : Homo sapiens -human

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG2c NAME FOR CELL LINE : LO-hG-22 HYBRIDOMA NAME FOR PRODUCT : LO-hG-22 MONO Ab ICDB NUMBER: 3046706

<u>REACTIVITY</u>: Human gamma heavy chain of immunoglobulin (4 subclasses)

CROSS-REACTIVITY

Does not cross-react with chicken and sheep Ig. Cross-reacts with rabbit IgG (ELISA test).

AVIDITY: on human polyclonal IgG: 2.7x10⁸ M⁻¹

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: MIDDLE BINDING ON PLASTICS

- CAN BE LABELLED WITH BIOTIN, FITC and PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAN BE USED TO REVEAL IgG ANTIBODY BINDING ON CELLS BY
- IMMUNOFLUORESCENCE (FLOW CYTOMETRY)

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : Purified Human IgG **GENUS SPECIES** : Homo sapiens -human

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG2c, allotype IgK-1a NAME FOR CELL LINE : LO-hG-24 HYBRIDOMA NAME FOR PRODUCT : LO-hG-24 MONO Ab ICDB NUMBER:

<u>REACTIVITY</u>: Human gamma heavy chain of immunoglobulin

CROSS-REACTIVITY

Cross-reacts with rabbit, horse, dog, swine, and baboon IgG.

AVIDITY : on human polyclonal IgG: 1.7x10⁹ M⁻¹

APPLICATIONS : Cf REACTIVITY

- CAPTURE ELISA: GOOD BINDING ON PLASTICS

- CAN BE LABELLED WITH BIOTIN, FITC and PEROXIDASE

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS

- CAN BE USED TO REVEAL IgG ANTIBODY BINDING ON CELLS BY

IMMUNOFLUORESCENCE (FLOW CYTOMETRY)

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

RAT MONOCLONAL ANTIBODIES ANTI-HUMAN INTERLEUKINS

CODE FOR RAT MAB ANTI-HUMAN INTERLEUKIN :

<u>LO-H''...''</u> : <u>**LO**</u>uvain rat <u>-</u> anti-<u>h</u>uman IL "<u>...</u>" <u>-</u> : number "<u>...</u>"

LO-hIL2-1 LO-hIL2-2 LO-hIL2-3 LO-hIL2-4 LO-hIL6-1 LO-hIL6-2

IMMUNOGEN

SUBSTANCE NAME : Recombinant human IL2 **GENUS SPECIES** : Homo sapiens -human

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG2b, allotype IgK-1a NAME FOR CELL LINE : LO-hIL2-1 HYBRIDOMA NAME FOR PRODUCT : LO-hIL2-1 MONO Ab ICDB NUMBER: 3055154

REACTIVITY :

- Recombinant and natural human IL2, bound to IL2 receptors on PHA-activated peripheral blood mononuclear cells (detection by U.V. microscopy and flow cytometry).
- Recombinant IL2, in the cell line BHKp-BEH transfected with the human IL2 gene (detection by U.V. microscopy only, on saponin permeabilized cells).
- LO-hIL2-1 and LO-hIL2-3 do not seem to bind to the same epitope.

<u>AVIDITY</u>: on recombinant human IL2: 7.9 x 10^8 M⁻¹

APPLICATIONS : Cf REACTIVITY

- CAN BE LABELLED WITH FITC, BIOTIN and PEROXIDASE

- CAN BE USED FOR CAPTURE ELISA (GOOD BINDING ON PLASTICS)

THIS MAb IS PREPARED WITHOUT SODIUM AZIDE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

FOR RESEARCH ONLY

IN USA THIS MAb CAN ONLY BE OBTAINED FROM BIOSOURCE

IMMUNOGEN SUBSTANCE NAME : Recombinant human IL2 GENUS SPECIES : Homo sapiens -human

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG, allotype IgK-1a NAME FOR CELL LINE : LO-hIL2-2 HYBRIDOMA NAME FOR PRODUCT : LO-hIL2-2 MONO Ab ICDB NUMBER: 3055155

<u>REACTIVITY</u>: Recombinant human IL2

<u>APPLICATIONS :</u> Cf REACTIVITY - CAN BE LABELLED WITH BIOTIN and PEROXIDASE - CAN BE USED FOR CAPTURE ELISA (GOOD BINDING ON PLASTICS)

THIS MAb IS PREPARED WITHOUT SODIUM AZIDE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

FOR RESEARCH ONLY

IN USA THIS MAb CAN ONLY BE OBTAINED FROM BIOSOURCE

IMMUNOGEN SUBSTANCE NAME : Recombinant human IL2 **GENUS SPECIES** : Homo sapiens -human

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG2a NAME FOR CELL LINE : LO-hIL2-3 HYBRIDOMA NAME FOR PRODUCT : LO-hIL2-3 MONO Ab ICDB NUMBER: 3055156

<u>REACTIVITY</u>: Recombinant human IL2. LO-hIL2-3 and LO-hIL2-1 do not seem to bind to the same epitope.

<u>AVIDITY</u>: on recombinant human IL2: $2 \times 10^8 \text{ M}^{-1}$

APPLICATIONS : Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN and PEROXIDASE - CAN BE USED FOR CAPTURE ELISA (GOOD BINDING ON PLASTICS)

THIS MAb IS PREPARED WITHOUT SODIUM AZIDE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

FOR RESEARCH ONLY

IN USA THIS MAb CAN ONLY BE OBTAINED FROM BIOSOURCE

IMMUNOGEN

SUBSTANCE NAME : Recombinant human IL2 **GENUS SPECIES** : Homo sapiens -human

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER

DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat Kappa IgM, allotype IgK-1a NAME FOR CELL LINE : LO-hIL2-4 HYBRIDOMA NAME FOR PRODUCT : LO-hIL2-4 MONO Ab ICDB NUMBER: 3055157

REACTIVITY:

- Recombinant and natural human IL2, bound to IL2 receptors on PHA-activated peripheral blood mononuclear cells (detection by U.V. microscopy and flow cytometry).
- Recombinant IL2, in the cell line BHKp-BEH transfected with the human IL2 gene (detection by U.V. microscopy only, on saponin permeabilized cells).

APPLICATIONS : Cf REACTIVITIES

- CAN BE LABELLED WITH FITC, BIOTIN and PEROXIDASE - CAN BE USED FOR CAPTURE ELISA (GOOD BINDING ON PLASTICS)

THIS MAB IS PREPARED WITHOUT SODIUM AZIDE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

FOR RESEARCH ONLY

IN USA THIS MAb CAN ONLY BE OBTAINED FROM BIOSOURCE

IMMUNOGEN SUBSTANCE NAME : Recombinant human IL6 **GENUS SPECIES** : Homo sapiens -human

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG, allotype IgK-1a NAME FOR CELL LINE : LO-hIL6-1 HYBRIDOMA NAME FOR PRODUCT : LO-hIL6-1 MONO Ab ICDB NUMBER: 3046709

REACTIVITY : Human IL6

AVIDITY : on recombinant human IL6: 2.9 x 10⁹M⁻¹

APPLICATIONS : Cf REACTIVITY

- CAN BE LABELLED WITH BIOTIN and PEROXIDASE

- CAN BE USED FOR CAPTURE ELISA (MEDIUM BINDING ON PLASTICS)

- CAN BE USED IN WESTERN BLOT ANALYSIS

- CAN BE USED IN IMMUNOPRECIPITATIONS

THIS MAb IS PREPARED WITHOUT SODIUM AZIDE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN SUBSTANCE NAME : Recombinant human IL6 **GENUS SPECIES** : Homo sapiens -human

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE : LO-hIL6-2 HYBRIDOMA NAME FOR PRODUCT : LO-hIL6-2 MONO Ab ICDB NUMBER: 3046710

REACTIVITY : Human IL6

AVIDITY : on recombinant human IL6: 1.4 x 10⁹M⁻¹

<u>APPLICATIONS</u> : Cf REACTIVITY

- CAN BE USED FOR CAPTURE ELISA (GOOD BINDING ON PLASTICS)

- CAN BE LABELLED WITH PEROXIDASE

- CAN BE USED IN WESTERN BLOT ANALYSIS

- CAN BE USED IN IMMUNOPRECIPITATIONS

THIS MAb IS PREPARED WITHOUT SODIUM AZIDE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.). CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

RAT MONOCLONAL ANTIBODIES ANTI-HUMAN LEUCOCYTES

CODE FOR RAT MAb ANTI-HUMAN LEUCOCYTES :

<u>LO-CD''...''-''...''</u> : <u>LO</u>uvain rat <u>-</u> anti-<u>CD</u> "<u>...</u>" <u>-</u> : number "<u>...</u>"

LO-CD1-a

LO-CD5-a

LO-CD6-a

LO-CD9

LO-CDw41 (LO-PL3b)

LO-DRa

LO-MO1 (CD14)

LO-panB-a (CDw78)

RAT MONOCLONAL ANTIBODIES ANTI-HUMAN LEUCOCYTES PERCENTAGE OF POSITIVE CELLS (INDICATIVE VALUES)*

MAb	Thymocytes	HPB-ALL	PBL	PBL-PHA	Total blood	
LO-CD1-a	71	6.4	0.0	0.6	0.0	
LO-CD5-a	96.8	98.3	73.0	85.0	66.3	
LO-CD6-a	66.4	3.5	74.0	84.4	61.1	
LO-CD9	1.7	1.7	1.3	1.0	0.2	
LO-Dra	92.9	90.5	36.8	79.5	28.3	
LO-MO1	0.3	3.7	1.9	2.2	9.5	
LO-CDw41	0.2	3.6	0.1	0.1	0.1	
LO-panB-a	ND	ND	14.0	ND	11.0	

*Determined by flow cytometry, by indirect fluorescence.

ND: not determined.

HPB-ALL: Acute lymphoid leukemia cell line.

PBL: Peripheral blood lymphocytes

PBL-PHA: Phytohemagglutinine activated PBL

<u>Concentration MAb</u>: 2 μg/ml, except for LO-panB-a: 10 μg/ml; MAb detected with MARK-1-FITC 2.5 μg/ml.

LO-PanB-a tested on tonsils gives 64% positive cells.

RAT MAb (LO-CD1-a) AGAINST HUMAN CORTICAL THYMOCYTES

ORIGIN :

Hybridoma derived by hybridization of non secreting rat myeloma IR983F (1) cells with spleen cells of a LOU/M rat immunized against human thymocytes.

<u>CLONE</u> : (3) LO-CD1-a ICDB NUMBER: 3003908

ISOTYPE : kappa IgG2a, allotype IgK-1a.

ANTIGEN SPECIFICITY :

CD1-a (PM : 49 kDa)

EPITOPE :

Does not compete for binding with OKT6 (Ortho-clone).

CELLULAR REACTIVITY (2):

Reacts with most thymocytes. Does not react with peripheral blood granulocytes, monocytes, lymphocytes platelets or erythrocytes, tonsil cells. Reacts with 25% ALL. Does not react with nonT-ALL, AML, B-CLL, B-lymphoma.

APPLICATIONS :

Identification of T-ALL. CAN BE LABELLED WITH FITC, BIOTIN

<u>REFERENCES</u> :

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618.

(2) Ravoet A.M., Latinne D., Seghers J., Manouvriez P., Ninane J., De Bruyère M., Bazin H., and Sokal G. Methods for analysis of rat monoclonal antibodies directed against human leukocyte differentiation antigens. In "Rat Hybridomas and Rat Monoclonal Antibodies". H. Bazin Ed. CRC Press, Boca Raton, Florida (in press).

(3) Leucocyte Typing IV. White Cell Differentiation Antigens. W. Knapp et al. (eds), Oxford University Press, 1989, p. 251, 259, 260, 261, 262, 267.

RAT MAb (LO-CD5-a) AGAINST HUMAN T CELLS AND B-CELL

ORIGIN

Hybridoma derived by hybridization of non secreting rat myeloma IR983F (1) cells with spleen cells of OKA inbred strain rat immunized against human thymocytes.

<u>CLONE</u> : (4) LO-CD5-a ICDB NUMBER: 3003910

ISOTYPE :

kappa IgG2a, allotype IgK-1b

ANTIGEN SPECIFICITY :

CD5 (p67)

EPITOPE :

Inhibits binding of the mouse Leu-1-CD5 MoAb (Becton Dickinson) (2) and of the mouse T1-CD5 MoAb (Coulter).

CELLULAR REACTIVITY (3):

Reacts with all peripheral blood T lymphocytes and a majority of thymocytes. Does not react with tonsil B cells, monocytes, granulocytes, platelets or erythrocytes. Reacts with T-ALL and weakly with B-CLL, but not with other leukemias.

APPLICATIONS :

Identification of T-lymphoid cells. Quantification of peripheral blood T cells. Elimination of T cells in vitro CAN BE LABELLED WITH FITC, BIOTIN

<u>REFERENCES</u> :

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618.

(2) Engelman et al; (1981) Proc. Natl. Acad; Sci. 78, 1791.

(3) Ravoet A.M., Latinne D., Seghers J., Manouvriez P., Ninane J., De Bruyère M., Bazin H., and Sokal G. Methods for analysis of rat monoclonal antibodies directed against human leukocyte differentiation antigens. In "Rat Hybridomas and Rat Monoclonal Antibodies". H. Bazin Ed. CRC Press, Boca Raton, Florida (in press).

(4) Leucocyte Typing IV. White Cell Differentiation Antigens. W. Knapp et al. (eds), Oxford University Press, 1989, p. 331, 332, 335, 336, 338.

Selected reference of scientific publication in which LO-CD5-a was used Alberola-Ila J., et al. J. Immunol. 1992, 148: 1287-1293.

RAT MAb (LO-CD6-a) AGAINST A HUMAN PAN-T LYMPHOCYTE DIFFERENTIATION ANTIGEN

ORIGIN:

Hybridoma derived by hybridization of non secreting rat myeloma IR983F (1) cells with spleen cells of a LOU/M rat immunized against the HPB-ALL line.

CLONE: LO-CD6-a

ICDB NUMBER: 3003911

ISOTYPE:

kappa IgG2a, allotype IgK-1a

ANTIGEN MOLECULAR WEIGHT : 129 kDa (HPB-ALL); 105, 125 kDa (T lymphocytes)

EPITOPE :

LO-CD6-a competes for binding with OKT12 (Ortho Diagnostics)

CELLULAR REACTIVITY (2):

LO-CD6-a reacts with on the average 73% of peripheral blood lymphocytes (92% of T lymphocytes).

LO-CD6-a does not react with peripheral blood granulocytes, monocytes, platelets or red blood cells.

LO-CD6-a weakly reacts with T-ALL, B-lymphomas and B-CLL, not with non T-ALL or AML.

APPLICATIONS :

Identification of mature T cells. CAN BE LABELLED WITH FITC

REFERENCES:

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618. (2) Xia H., Ravoet A.M., Latinne D., Ninane J., De Bruyère M., Sokal G., and Bazin H. Rat monoclonal antibodies specific for human T lymphocytes. In "Rat Hybridomas and Rat Monoclonal Antibodies". H. Bazin Ed. CRC Press, Boca Raton, Florida (in press).

RAT MAb (LO-CD9) AGAINST HUMAN LEUKEMIA AND PLATELET-ASSOCIATED ANTIGEN p24

ORIGIN :

Hybridoma derived by hybridization of non secreting rat myeloma IR983F (1) cells with spleen cells of a LOU/M rat immunized against human mononuclear cells and platelets.

CLONE : LO-CD9 **ICDB NUMBER: 3003912**

ISOTYPE :

kappa IgG1, allotype IgK-1a

ANTIGEN SPECIFICITY CD9, p24 (2)

CELLULAR REACTIVITY:

Reacts with platelets, monocytes and some thymocytes. Does not react with mature B or T lymphocytes, granulocytes or erythrocytes. Reacts with non-T ALL and some AML

APPLICATIONS :

In vitro elimination of leukemic cells.

REFERENCES:

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y.: 615-618.

(2) Ravoet et al. in "Leucocyte Typing III : White Cell Differentiation Antigens" (Mc Michael et al. eds) Oxford University Press, 1987, p 755- 758.

RAT MAb (LO-CDw41) AGAINST HUMAN MEGAKARYOCYTIC LINEAGE

ORIGIN:

Hybridoma derived by hybridization of non secreting rat myeloma IR983F (1) cells with spleen cells of an OKA inbred strain rat immunized against human mononuclear cells and platelets.

<u>CLONE</u>: (3) LO-CDw41 (LO-PL3b) ICDB NUMBER: 3003913

ISOTYPE :

Rat kappa IgG2a, allotype IgK-1b

ANTIGEN SPECIFICITY :

Platelets glycoprotein complexIIb-IIIa (present on activated platelets) whose subunits have estimated molecular weights of 96; 106 and 26 kDa (2).

CELLULAR REACTIVITY :

Reacts with platelets, bone marrow megakaryocytes. Does not react with lymphocytes, monocytes, granulocytes or erythrocytes. Reacts with AML-M7 blasts.

APPLICATIONS :

Identification of acute myeloblastic leukemia involving the megakaryocytic lineage. CAN BE LABELLED WITH FITC

REFERENCES :

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618.

(2) Ravoet et al. in "Leucocyte Typing III : White Cell Differentiation Antigens" (Mc Michael et al. eds) Oxford University Press, 1987, p 755-758.

(3) Leucocyte Typing IV. White Cell Differentiation Antigens. W. Knapp et al. (eds), Oxford University Press, 1989, p. 951, 967, 971, 981.

RAT MAb (LO-DRa) AGAINST HLA CLASS II

ORIGIN :

Hybridoma derived by hybridization of non secreting rat myeloma IR983F (1) cells with spleen cells of a LOU/M rat immunized against human peripheral lymphocytes activated by phytohemagglutinin.

CLONE :

LO-DRa ICDB NUMBER: 3003914

ISOTYPE :

kappa IgG2b, allotype IgK-1a

ANTIGEN SPECIFICITY :

HLA-class II ; p29 : 34kDa

EPITOPE :

Inhibits binding of the mouse OKIa MoAb (Ortho-clone). (2)

CELLULAR REACTIVITY :

Reacts with B lymphocytes of peripheral blood, tonsils and spleen. Reacts with dendritic cells, monocytes and activated T lymphocytes. Does not react with peripheral T lymphocytes, granulocytes, platelets or erythrocytes. Reacts with non-T leukemias and non-T lymphomas and with most AML.

APPLICATIONS :

- Detection of leukaemic non-T lymphoblast and myeloblasts. Quantification of B cells.

- CAN BE LABELLED WITH FITC, BIOTIN
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY (purified, revealed by MARG2b-3 PO)
- CAN BE USED ON PARAFFIN SECTIONS (IMMUNOPEROXIDASE).

REFERENCES :

Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot.
 Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618.
 Reinherz et al. (1979) J. Exp. Med. 150, 1472.

RAT MAb (LO-MO1) AGAINST HUMAN MATURE MONOCYTES

ORIGIN:

Hybridoma derived by hybridization of non secreting rat myeloma IR983F (1) cells with spleen cells of a LOU/M rat immunized against human peripheral blood mononuclear cells.

<u>CLONE</u>: LO-MO1 ICDB NUMBER: 3003916

<u>ISOTYPE</u> : kappa IgG2b, allotype IgK-1a

ANTIGEN SPECIFICITY

CD14 (3)

CELLULAR REACTIVITY (2):

Reacts with monocytes in peripheral blood, tonsils, etc. Does not react with B or T cells, granulocytes, platelets or erythrocytes. Does not react with AML-M4, AML-M5

APPLICATIONS :

- CAN BE LABELLED WITH FITC, BIOTIN Quantification of monocytes in cell suspensions. Fast depletion of monocytes. Fundamental studies on monocytes.

<u>REFERENCES</u> :

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618.

(2) Ravoet A.M., Latinne D., Seghers J., Manouvriez P., Ninane J., De Bruyère M., Bazin H., and Sokal G. Rat monoclonal antibodies against human leukocyte differentiation antigens. In "Rat Hybridomas and Rat Monoclonal Antibodies". H. Bazin ed. CRC Press, Boca Raton, Florida, 1990, pp. 287-307.

(3) Leucocyte Typing IV. White Cell Differentiation Antigens. W. Knapp et al. (eds), Oxford University Press, 1989, p. 747, 787.

RAT MAb (LO-panB-a) AGAINST B CELLS

ORIGIN :

Hybridoma derived by hybridization of non secreting rat myeloma IR983F (2,3) cells with spleen cells of a LOU/M rat (1) immunized against human B chronic lymphocytic leukaemia cells.

<u>CLONE</u> : (3) LO-panB-a ICDB NUMBER: 3600202

ISOTYPE :

Rat kappa IgG2b, allotype IgK-1a.

ANTIGEN SPECIFICITY :

CDW78 (4)

CELLULAR REACTIVITY (2):

Reacts with B lymphocytes from peripheral blood, tonsil, spleen, and activated B cells (EBV,SAC)

Does not react with T cells, monocytes, granulocytes, platelets or erythrocytes. Reacts with B-CLL, Burkitt's lymphoma, most non-T ALL and PHA-PBL.

APPLICATIONS :

- Identification of B malignancies.
- Quantification of B cells.
- In vitro elimination of B cells.
- CAN BE LABELLED WITH FITC
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST ANTIBODY LABELLED WITH FITC (5)

<u>REFERENCES</u> :

(1) Bazin H., Deckers C., Beckers A., Heremans J.F. Transplantable immunoglobulin-secreting tumours in rats.I.General features in LOU/WsI STRAIN rat immunocytomas and their monoclonal proteins. Int. J. Cancer, 1972, 10: 568-580.

(2) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618.

(3) Lebacq-Verheyden A.M., Neirynck A., Ravoet A.M., Bazin H. Rat hybridoma technology: culturing of rat myeloma cell line IR983F prior to cell fusion. Hybridoma, 1983, 2: 355-358.

(4) Leucocyte Typing IV. White Cell Differentiation Antigens. W. Knapp et al. (eds), Oxford University Press, 1989, p. 122,126,142,154,165,200,219,224.

(5) Bombil et al. Cancer Immunol. Immunother., 1995, 40: 383-389.

RAT MONOCLONAL ANTIBODIES ANTI-HUMAN IMMUNODEFICIENCY VIRUS

CODE FOR RAT MAb ANTI-HUMAN IMMUNODEFICIENCY VIRUS :

<u>LO - HIV - "..."</u> : <u>LO</u>uvain Rat - anti-<u>H</u>uman <u>I</u>mmunodeficiency <u>V</u>irus - number <u>"..."</u>

LO-HIV1-1

LO-HIV1-2

IMMUNOGEN SUBSTANCE NAME : CEM cell line infected with HIV1

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN: LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-HIV1-1 HYBRIDOMA NAME FOR PRODUCT : LO-HIV1-1 MONO Ab ICDB NUMBER: 3003920

<u>REACTIVITY:</u> LO-HIV1-1 binds to p24 and precursors human immunodeficiency virus type 1 (strains LAV, ARV, HTLV III) It does not bind to HIV2.

APPLICATIONS : Cf REACTIVITY

- CAN BE USED IN INDIRECT IMMUNOFLUORESCENCE
- CAN BE USED IN WESTERN BLOT ANALYSIS
- CAN BE USED IN SLOT BLOT ANALYSIS
- CAN BE USED IN CAPTURE ELISA
- CAN BE LABELLED WITH PEROXIDASE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

FOR RESEARCH USE ONLY

IMMUNOGEN SUBSTANCE NAME : HUT cell line infected with HIV1

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN: LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat Kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-HIV1-2 HYBRIDOMA NAME FOR PRODUCT : LO-HIV1-2 MONO Ab ICDB NUMBER: 3003921

<u>REACTIVITY:</u> LO-HIV1-2 binds to p24 and precursors human immunodeficiency virus type 1 (strains LAV, ARV, HTLV III) It does not bind to HIV2.

APPLICATIONS : CF REACTIVITY

- CAN BE USED IN INDIRECT IMMUNOFLUORESCENCE
- CAN BE USED IN WESTERN BLOT ANALYSIS
- CAN BE USED IN SLOT BLOT ANALYSIS
- CAN BE USED IN CAPTURE ELISA
- CAN BE LABELLED WITH PEROXIDASE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

FOR RESEARCH USE ONLY

RAT MONOCLONAL ANTIBODIES ANTI RABBIT IgG

CODE FOR RAT MAb ANTI-RABBIT IMMUNOGLOBULIN

 $\underline{LO} - \underline{R} " \underline{...} " - \underline{...} " : \underline{LO}$ uvain Rat - anti- \underline{R} abbit Ig " \underline{...} " - number " \underline{...} "

LO-RG-1

<u>IMMUNOGEN</u> SUBSTANCE NAME : IgG

GENUS SPECIES : Oryctolagus cuniculus - Rabbit

IMMUNOCYTE DONOR

GENUS SPECIES : Rattus norvegicus - rat **STRAIN** : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED : Rat kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE : LO-RG-1 HYBRIDOMA NAME FOR PRODUCT : LO-RG-1 MONO Ab ICDB NUMBER: 3042719

<u>REACTIVITY</u>: Rabbit gamma heavy chain of immunoglobulin (determined by immunodot) (IgG)

<u>**CROSS-REACTIVITY</u>**: Does not bind to chicken, goat, sheep, bovine, horse, dog, pig and baboon IgG (ELISA test) and mouse IgG and IgM.</u>

<u>APPLICATIONS</u> : Cf REACTIVITIES

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS
- CAN BE LABELLED WITH FITC, TRITC, BIOTIN AND PEROXIDASE
- CAN BE USED IN IMMUNOAFFINITY CHROMATOGRAPHY for purification of Rabbit IgG (Solid phase Sepharose 4B CNBr act.)
- CAPTURE ELISA: GOOD BINDING ON PLASTICS
- CAN BE USED ON CRYOSECTIONS (IMMUNOHISTOLOGY) AS FIRST OR SECOND ANTIBODY LABELLED WITH PEROXIDASE

LYOPHILIZATION: not tested

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981, Pergamon Press Oxford and N.Y., pp. 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

RAT MONOCLONAL ANTIBODIES ANTI-BOVINE GAMMAGLOBULIN (IgG)

CODE RAT FOR MAb ANTI-BOVINE GAMMAGLOBULIN :

<u>LO - BG - "..."</u> : <u>LO</u>uvain Rat - anti-<u>Bo</u>vine <u>G</u>ammaglobulin <u>-</u> number "<u>...</u>"

LO-BoG-1

LO-BoG-2

IMMUNOGEN SUBSTANCE NAME:Bovine gammaglobulin

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE: LO-BoG-1 HYBRIDOMA NAME FOR PRODUCT: LO-BoG-1 MONO Ab ICDB NUMBER: 3003918

REACTIVITIES

BOVINE GAMMA1 and GAMMA2 GLOBULIN

CROSS-REACTIVITY: does not bind to coated human IgG and IgM and baboon IgG in ELISA

APPLICATIONS : Cf REACTIVITIES

- CAN BE LABELLED WITH PEROXIDASE

AVIDITY: on bovine IgG1: $8.1 \times 10^8 \text{ M}^{-1}$

LYOPHILIZATION: Yes.

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN

SUBSTANCE NAME: Bovine gammaglobulin

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE: LO-BoG-2 HYBRIDOMA NAME FOR PRODUCT: LO-BoG-2 MONO Ab ICDB NUMBER: 3003919

REACTIVITIES

BOVINE GAMMA1 GLOBULIN

CROSS-REACTIVITY: does not bind to coated human IgG and IgM in ELISA

AVIDITY: on bovine IgG1: $3.7 \times 10^8 \text{ M}^{-1}$

APPLICATIONS: Cf. REACTIVITY - CAN BE LABELLED WITH PEROXIDASE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

RAT MONOCLONAL ANTIBODIES ANTI-HORSE RADISH PEROXIDASE

CODE FOR RAT MAb ANTI-HORSE RADISH PEROXIDASE :

<u>LO - HRP - "..."</u> : <u>LO</u>uvain Rat <u>-</u> anti-<u>H</u>orse <u>R</u>adish <u>P</u>eroxidase <u>-</u> number "<u>...</u>"

LO-HRP-13

LO-HRP-14

IMMUNOGEN

SUBSTANCE NAME : Horse radish peroxidase (Boehringer Mannheim Cat. No.108.090)

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-HRP-13 HYBRIDOMA NAME FOR PRODUCT : LO-HRP-13 MONO Ab ICDB NUMBER: 3003922

<u>REACTIVITY</u>: Horse radish peroxidase

<u>APPLICATIONS</u>: Cf. REACTIVITY CAN BE LABELLED WITH BIOTIN, FITC AND PEROXIDASE

AVIDITY : 5.1x10⁹ M⁻¹

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

IMMUNOGEN

SUBSTANCE NAME : Horse radish peroxidase (Boehringer Mannheim Cat. No.108.090)

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat kappa IgG1, allotype IgK-1a NAME FOR CELL LINE : LO-HRP-14 HYBRIDOMA NAME FOR PRODUCT : LO-HRP-14 MONO Ab ICDB NUMBER: 3003923

<u>REACTIVITY</u>: Horse radish peroxidase

AVIDITY: 1.7x10¹⁰ M⁻¹

APPLICATIONS : Cf REACTIVITY - CAN BE LABELLED WITH FITC AND PEROXIDASE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

RAT MONOCLONAL ANTIBODY ANTI-FLUORESCEIN

LO-FLUO-1

IMMUNOGEN SUBSTANCE NAME : Mouse IgG1 kappa labelled with FITC

IMMUNOCYTE DONOR GENUS SPECIES : Rattus norvegicus - rat STRAIN : LOU/C

IMMORTAL CELL PARTNER DESIGNATION : non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY CLASS OF ANTIBODY PRODUCED : Rat kappa IgM, allotype IgK-1a NAME FOR CELL LINE : LO-FLUO-1 HYBRIDOMA NAME FOR PRODUCT : LO-FLUO-1 MONO Ab ICDB NUMBER: 3046697

<u>REACTIVITY</u>: Fluorescein isothiocyanate

AVIDITY: on FITC labelled BSA: 2 x 10¹⁰M⁻¹

APPLICATIONS : Cf REACTIVITIES

- CAN BE USED AS SECOND ANTIBODY IN IMMUNOASSAYS ON A FIRST FITC LABELLED ANTIBODY
- CAN BE LABELLED WITH BIOTIN, FITC AND PEROXIDASE
- CAN BE USED FOR CAPTURE ELISA (GOOD BINDING ON PLASTICS)
- IN IMMUNOFLUORESCENCE, CAN CLEARLY AMPLIFY THE FLUORESCENCE INTENSITY OF A DIRECT FITC STAINING, USING THE FOLLOWING SYSTEM: FIRST ANTIBODY-FITC + LO-FLUO-1-BIOTIN + AVIDIN-FITC

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages.

RAT MONOCLONAL ANTIBODIES ANTI-DINITROPHENYL HAPTEN

CODE FOR RAT MAb ANTI-DINITROPHENYL HAPTEN :

<u>LO - DNP - "..."</u> : <u>LO</u>uvain Rat_anti-<u>Din</u>itro<u>P</u>henyl Hapten <u>-</u> number "<u>...</u>"

MAb	Isotype of the MAb
LO-DNP-34	IgM kappa
LO-DNP-40	IgM kappa
LO-DNP-1	IgG1 kappa
LO-DNP-2	IgG1 kappa
LO-DNP-16	IgG2a kappa
LO-DNP-61 ⁽¹⁾	IgG2a kappa
LO-DNP-11 ⁽¹⁾	IgG2b kappa
LO-DNP-57	IgG2b kappa
LO-DNP-30	IgE kappa
LO-DNP-10	IgE kappa
LO-DNP-45	IgA kappa
LO-DNP-64 ⁽¹⁾	IgA kappa

⁽¹⁾Upon request.

Binding of some rat anti-DNP mAbs⁽¹⁾ to rat splenic cells⁽²⁾ (Percentage of positive cells as assessed by Flow Cytometry)

	LO-DNP-45-FITC (IgA)		LO-DNP-30-FITC (lgE)		LO-DNP-34-FITC (IgM)		LO-DNP-1-FITC (lgG1)		LO-DNP-16-FITC (IgG2a)		LO-DNP-11-FITC (lgG2b)		LO-DNP-57-FITC (lgG2b)	
mAb Gate														
final concentration	Lymph.	Mon./Bl.	Lymph.	Mon./Bl.	Lymph.	Mon./Bl.	Lymph.	Mon./Bl.	Lymph.	Mon./Bl.	Lymph.	Mon./Bl.	Lymph.	Mon./Bl.
10 µg/ml	2.3	17.5	66.4	78.8	57.7	75.5	64.6	79.9	95.2	94.5	48.9	73.1	92.6	94.5
5 µg/ml	1.4	10.6	10.5	25.3	15.4	37.0	22.9	43.6	85.7	90.0	14.3	45.1	82.0	85.5
2.5 µg/ml	0.8	9.6	2.1	16.2	4.6	28.1	5.0	27.9	58.8	68.1	6.2	28.1	58.5	75.6
1.25 µg/ml	0.9	9.4	0.9	11.5	2.0	14.5	2.2	16.5	19.2	28.8	3.7	19.7	20.7	44.3

(1) Rat MAb described in this catalogue.

(2) Splenic cells were isolated by density sedimentation on Ficoll-Hypague. 5x10⁵ cells were incubated at 4°C for 30 min with 100 μl of mAb at the (final) concentrations indicated. After washing in PBS/2%/FCS/0.2% NaN₃, cells were fixed in 1% formaldehyde and analysed by flow cytometry in a FACScan cytofluorometer gating on lymphocytes or monocytes and blast cells.

CONCLUSION: as negative control (for rat mAbs), optimal concentrations around 1.25 µg/ml are recommended (see data sheet for each mAb of the catalogue). Lymph.: Lymphocytes

Mon./BI.: Monocytes and blast cells

LO-DNP-16 FITC and LO-DNP-57 FITC are not recommended as negative controls on rat splenic cells, because of a high (probably Fc-mediated) binding to these cells.

Binding of some rat anti-DNP mAb⁽¹⁾ to human PBMC⁽²⁾

(Percentage of positive cells as assessed by Flow Cytometry)

		LO-DNP-45-FITC LO-E (IgA)		LO-DNP-30-FITC (lgE)		LO-DNP-34-FITC (IgM)		LO-DNP-1-FITC (lgG1)		LO-DNP-16-FITC (IgG2a)		LO-DNP-11-FITC (lgG2b)		57-FITC 2b)
mAb Gate final concentration	Lymph.	Mon./Gra.	Lymph.	Mon./Gra.	Lymph.	Mon./Gra.	Lymph.	Mon./Gra.	Lymph.	Mon./Gra.	Lymph.	Mon./Gra.	Lymph.	Mon./Gra.
10 µg/ml	1.2	0.0	10.3	3.8	22.0	2.1	9.8	27.7	31.1	8.8	12.7 ⁻	4.4	17.0	25.4
5 µg/ml	0.6	0.0	2.1	0.5	11.3	1.1	4.5	10.3	13.8	1.1	6.2	6.7	12.2	18.8
2.5 µg/ml	0.4	0.1	1.1	0.2	7.1	1.3	2.1	1.7	7.9	0.8	2.3	3.9	9.0	12.6
1.25 µg/ml	0.3	0.0	0.4	0.0	3.6	0.5	1.0	0.1	3.2	0.3	1.4	2.3	7.3	3.8

(1) Rat MAb described in this catalogue.

(2) PBMC were isolated by density sedimentation on Ficoll-Hypague. 5x10⁵ cells were incubated at 4°C for 30 min with 100 μl of mAb at the (final) concentrations indicated. After washing in PBS/2%/FCS/0.2% NaN3, cells were fixed in 1% formaldehyde and analysed by flow cytometry in a FACScan cytofluorometer gating on lymphocytes or monocytes-granulocytes.

CONCLUSION: as negative control (for rat mAbs to human cells), optimal concentrations between 2.5 and 5.0 µg/ml are recommended (see data sheet for each mAb of the catalogue).

Lymph.: Lymphocytes

Mon./Gra.: Monocytes and Granulocytes

Binding of some rat anti-DNP mAbs⁽¹⁾ to mouse splenic cells⁽²⁾ (Percentage of positive cells as assessed by Flow Cytometry)

	LO-DNP-45-FITC (IgA)		LO-DNP-30-FITC (IgE)		LO-DNP-34-FITC (IgM)		LO-DNP-1-FITC (lgG1)		LO-DNP-16-FITC (IgG2a)		LO-DNP-11-FITC (IgG2b)		LO-DNP-57-FITC (IgG2b)	
Gate mAb final concentration	Lymph.	Mon./Bla.	Lymph.	Mon./Bla.	Lymph.	Mon./Bla.	Lymph.	Mon./Bla.	Lymph.	Mon./Bla.	Lymph.	Mon./Bla.	Lymph.	Mon./Bla.
10 µg/ml	1.5	3.9	32.0	18.5	12.1	11.1	34.9	38.1	27.4	7.7	0.2	0.2	22.0	23.6
5 µg/ml	1.0	2.8	20.4	6.8	3.3	5.4	23.6	23.4	6.7	3.6	0.5	0.4	13.4	14.0
2.5 µg/ml	0.7	2.2	7.5	1.2	1.8	3.3	10.4	8.4	0.7	0.7	0.1	0.0	7.8	2.2
1.25 µg/ml	0.5	1.6	1.0	0.0	1.3	2.6	3.9	4.2	0.1	0.8	0.0	0.3	1.7	3.1

(1) Rat MAb described in this catalogue.

(2) Splenic cells were isolated by density sedimentation on Ficoll-Hypague. 5x10⁵ cells were incubated at 4°C for 30 min with 100 μl of mAb at the (final) concentrations indicated. After washing in PBS/2%/FCS/0.2% NaN₃, cells were fixed in 1% formaldehyde and analysed by flow cytometry in a FACScan cytofluorometer gating on lymphocytes or monocytes and blast cells.

CONCLUSION: as negative control (for rat mAbs to mouse cells), optimal concentrations between 2.5 and 5.0 µg/ml are recommended (see data sheet for each mAb of the catalogue).

Lymph.: Lymphocytes

Mon./Bl.: Monocytes and blast cells

IMMUNOGEN

SUBSTANCE NAME: DNP-OVALBUMIN

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgG1, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-1 NAME FOR PRODUCT: LO-DNP-1 ICDB NUMBER: 3000002

<u>REACTIVITY</u>: DINITROPHENYL HAPTEN

<u>CROSS-REACTIVITY</u>: No specific binding on human platelets.

AVIDITY: on DNP-BGG: 8.4 x 10¹⁰ M⁻¹

<u>APPLICATIONS</u>: Cf. REACTIVITY - CAN BE LABELLED WITH FITC, BIOTIN AND PEROXIDASE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

IMMUNOGEN

SUBSTANCE NAME: DNP-ASCARIS, Nippostrongylus brasiliensis-DNP

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgG1, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-2 NAME FOR PRODUCT: LO-DNP-2 ICDB NUMBER: 3000239

<u>REACTIVITY</u>: DINITROPHENYL HAPTEN

APPLICATIONS: Cf. REACTIVITY - CAN BE LABELLED WITH PEROXIDASE

AVIDITY: on DNP-BGG: $1.7 \times 10^{10} \text{ M}^{-1}$

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618. <u>Selected references of scientific publications in which LO-DNP-2 was used</u>

Mysliwietz J., Thierfelder S. Transplantation 1993, 56: 1266-1269; Kaetzel C.S. et al. J. Immunol. 1994, 152: 72-76; Louis, H. et al. Gastroenterology 1997, 112: 935-942.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

IMMUNOGEN

SUBSTANCE NAME: DNP-OVALBUMIN

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-16 NAME FOR PRODUCT: LO-DNP-16 ICDB NUMBER: 3000253

<u>REACTIVITY</u>: DINITROPHENYL HAPTEN

CROSS-REACTIVITY: No specific binding on human platelets.

AVIDITY: on DNP-BGG: 2.2 x 10¹⁰ M⁻¹

LYOPHILIZATION: Yes.

APPLICATIONS: Cf. REACTIVITY - CAN BE LABELLED WITH FITC AND BIOTIN

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.
<u>Selected references of scientific publications in which LO-DNP-16 was used</u>
Daëron M. et al. J. Immunol. 1992, 149: 1365-1373.
Latour S.et al. J. Immunol. 1992, 149: 2155-2162.
Bocek P. et al. Eur. J. Immunol. 1995, 25: 2948-2955

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

IMMUNOGEN

SUBSTANCE NAME: DNP-SALMONELLA

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgG2a, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-61 NAME FOR PRODUCT: LO-DNP-61 ICDB NUMBER: 3000298

REACTIVITY: DINITROPHENYL HAPTEN (2)

AVIDITY: on DNP-BGG: 7.1 x 10¹⁰ M⁻¹

REFERENCES

 Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.
 Rits M., Cormont F., Bazin H., Meykens R. & Vaerman J.P. Rat monoclonal antibodies.VI.Production of IgA secreting hybridomas with specificity for the 2,4 dinitrophenyl (DNP) hapten. J. Immunol. Methods 1986, 89, 81-87. Selected reference of scientific publication in which LO-DNP-61 was used Vanhove B., Bazin H. Mol. Immunol., 1992, 29 : 1-8.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

IMMUNOGEN

SUBSTANCE NAME: DNP-OVALBUMIN

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgG2b, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-11 NAME FOR PRODUCT: LO-DNP-11 ICDB NUMBER: 3000248

<u>REACTIVITY</u>: DINITROPHENYL HAPTEN

AVIDITY: on DNP-BGG: 3.8 x 10¹⁰ M⁻¹

<u>APPLICATIONS</u>: Cf. REACTIVITY - CAN BE LABELLED WITH FITC AND BIOTIN

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot.
 Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.
 <u>Selected reference of scientific publication in which LO-DNP-11 was used</u>
 Vanhove B., Bazin H. Mol. Immunol., 1992, 29 : 1-8.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

IMMUNOGEN

SUBSTANCE NAME: DNP-SALMONELLA

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgG2b, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-57 NAME FOR PRODUCT: LO-DNP-57 ICDB NUMBER: 3000294

REACTIVITY: DINITROPHENYL HAPTEN (2)

AVIDITY: on DNP-BGG: $1.4 \times 10^{10} \text{ M}^{-1}$

<u>APPLICATIONS</u>: Cf. REACTIVITY - CAN BE LABELLED WITH FITC AND BIOTIN

REFERENCES

 Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.
 Rits M., Cormont F., Bazin H., Meykens R. & Vaerman J.P. Rat monoclonal antibodies.VI.Production of IgA secreting hybridomas with specificity for the 2,4 dinitrophenyl (DNP) hapten. J. Immunol. Methods 1986, 89, 81-87. Selected references of scientific publications in which LO-DNP-57 was used Vanhove B., Bazin H. Mol. Immunol., 1992, 29 : 1-8. Soares M. et al. Transplantation 1993, 56: 1427-1433.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

IMMUNOGEN

SUBSTANCE NAME: DNP-SALMONELLA

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgA, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-45 NAME FOR PRODUCT: LO-DNP-45 ICDB NUMBER: 3000282

REACTIVITY: DINITROPHENYL HAPTEN (2)

AVIDITY: on DNP-BGG: $3.2 \times 10^{10} \text{ M}^{-1}$

<u>APPLICATIONS</u>: Cf. REACTIVITY - CAN BE LABELLED WITH FITC AND BIOTIN

REFERENCES

 Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.
 Rits M., Cormont F., Bazin H., Meykens R. & Vaerman J.P. Rat monoclonal antibodies.VI.Production of IgA secreting hybridomas with specificity for the 2,4 dinitrophenyl (DNP) hapten. J. Immunol. Methods 1986, 89, 81-87. Selected reference of scientific publication in which LO-DNP-45 was used Bogers WM Scand. J. Immunol., 1990, 31 : 679-689. Rits M. et al. Scand. J. Immunol. 1987, 25: 359-366

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

IMMUNOGEN

SUBSTANCE NAME: DNP-SALMONELLA

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgA, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-64 NAME FOR PRODUCT: LO-DNP-64 ICDB NUMBER: 3000301

REACTIVITY: DINITROPHENYL HAPTEN (2)

REFERENCES

Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot.
 Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.
 Rits M., Cormont F., Bazin H., Meykens R. & Vaerman J.P. Rat monoclonal antibodies.VI.Production of IgA secreting hybridomas with specificity for the 2,4 dinitrophenyl (DNP) hapten. J. Immunol. Methods 1986, 89, 81-87.

Selected reference of scientific publication in which LO-DNP-64 was used Kaetzel C.S. et al. J. Immunol. 1994, 152: 72-76

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

IMMUNOGEN

SUBSTANCE NAME: Nippostrongylus brasiliensis-DNP

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgE, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-30 NAME FOR PRODUCT: LO-DNP-30 ICDB NUMBER: 3000267

REACTIVITY: DINITROPHENYL HAPTEN

AVIDITY: on DNP-BGG: 1.5 x 10¹⁰ M⁻¹

APPLICATIONS: Cf. REACTIVITY - CAN BE LABELLED WITH FITC AND BIOTIN

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.

<u>Selected reference of scientific publication in which LO-DNP-30 was used</u> Vanhove B., Bazin H. Mol. Immunol., 1992, 29 : 1-8.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

IMMUNOGEN

SUBSTANCE NAME: Nippostrongylys brasiliensis-DNP

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgM, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-40 NAME FOR PRODUCT: LO-DNP-40 ICDB NUMBER:

<u>REACTIVITY</u>: DINITROPHENYL HAPTEN

<u>APPLICATIONS</u>: Cf. REACTIVITY - CAN BE LABELLED WITH BIOTIN AND PEROXIDASE

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

IMMUNOGEN

SUBSTANCE NAME: DNP-OVALBUMIN

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgM, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-34 NAME FOR PRODUCT: LO-DNP-34 ICDB NUMBER: 3000271

REACTIVITY: DINITROPHENYL HAPTEN

AVIDITY: on DNP-BGG: 5.5 x 10¹⁰ M⁻¹

<u>APPLICATIONS</u>: Cf. REACTIVITY - CAN BE LABELLED WITH FITC AND BIOTIN

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.

<u>Selected reference of scientific publication in which LO-DNP-34 was used</u> Soares M. et al. Transplantation 1993, 56: 1427-1433.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

IMMUNOGEN

SUBSTANCE NAME: DNP-OVALBUMIN

IMMUNOCYTE DONOR

GENUS SPECIES: Rattus norvegicus - rat STRAIN: LOU/C TISSUE SOURCE: Spleen

IMMORTAL CELL PARTNER

DESIGNATION: non secreting LOU/C rat IR983F fusion line (1)

HYBRIDOMA CELLS AND MONOCLONAL ANTIBODY

CLASS OF ANTIBODY PRODUCED: Rat kappa IgE, allotype IgK-1a NAME FOR CELL LINE: LO-DNP-10 NAME FOR PRODUCT: LO-DNP-10 ICDB NUMBER:

REACTIVITY: DINITROPHENYL HAPTEN

<u>APPLICATIONS</u>: Cf. REACTIVITY - CAN BE LABELLED WITH BIOTIN AND FITC

REFERENCE

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. Ed., 29th Colloquium 1981, Pergamon Press, Oxford and N.Y., pp. 615-618.

For more information, see: "Rat Hybridomas and Rat Monoclonal Antibodies". H. BAZIN (Ed.), CRC Press, Boca Raton, Florida, USA, 1990, 515 pages and specially Platteau B., Rits M., Cormont F., Wauters D., Bazin H. Production and characterization of rat-rat hybridomas against DNP-Hapten. pp. 281-285.

MOUSE MONOCLONAL ANTIBODIES ANTI-DINITROPHENYL HAPTEN

CODE FOR MOUSE MAb ANTI-DINITROPHENYL HAPTEN :

<u>MADNP - "..."</u> : <u>M</u>ouse <u>A</u>nti-<u>Din</u>itro<u>P</u>henyl Hapten <u>-</u> number "<u>...</u>"

MAb	Isotype of the MAb	Avidity tested on DNP-BGG (M ⁻¹)
MADNP-1	IgG1 kappa	8.2 x 10 ⁹
MADNP-2	IgG2a kappa	4.1 x 10 ¹⁰
MADNP-3	IgG2b kappa	1.8 x 10 ⁹
MADNP-4	IgG3 kappa	1.8 x 10 ⁹
MADNP-5	IgM kappa	$1.3 \ge 10^{10}$

All these MoAbs are available purified, labelled with peroxidase, biotin and FITC and as supernatant form.

RAT MAb (LO-CD1-a) AGAINST HUMAN CORTICAL THYMOCYTES

ORIGIN :

Hybridoma derived by hybridization of non secreting rat myeloma IR983F (1) cells with spleen cells of a LOU/M rat immunized against human thymocytes.

<u>CLONE</u>: (3) LO-CD1-a ICDB NUMBER: 3003908

<u>ISOTYPE</u> : kappa IgG2a, allotype IgK-1a.

ANTIGEN SPECIFICITY : CD1-a (PM : 49 kDa)

EPITOPE :

Does not compete for binding with OKT6 (Ortho-clone).

CELLULAR REACTIVITY (2):

Reacts with most thymocytes. Does not react with peripheral blood granulocytes, monocytes, lymphocytes platelets or erythrocytes, tonsil cells. Reacts with 25% ALL. Does not react with nonT-ALL, AML, B-CLL, B-lymphoma.

APPLICATIONS :

Identification of T-ALL. CAN BE LABELLED WITH FITC, BIOTIN

REFERENCES :

(1) Bazin H. Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot. Biol. Fluids, 1982, Peeters E. ed., 29th colloquium 1981 Pergamon Press Oxford and N.Y. : 615-618.

(2) Ravoet A.M., Latinne D., Seghers J., Manouvriez P., Ninane J., De Bruyère M., Bazin H., and Sokal G. Methods for analysis of rat monoclonal antibodies directed against human leukocyte differentiation antigens. In "Rat Hybridomas and Rat Monoclonal Antibodies". H. Bazin Ed. CRC Press, Boca Raton, Florida (in press).
(3) Leucocyte Typing IV. White Cell Differentiation Antigens. W. Knapp et al. (eds), Oxford University Press, 1989, p.

(3) Leucocyte Typing IV. White Cell Differentiation Antigens. W. Knapp et al. (eds), Oxford University Press, 1989, p. 251, 259, 260, 261, 262, 267.