

Rapid Test Kit Rabies Ag

Anigen Rapid Rabies Ag Test Kit is a solid phase chromatographic immunoassay for the qualitative detection of Rabies virus antigen in canine, bovine, raccoon dog's secretions of saliva, and brain homogenates.



Background

Rabies is an acute viral disease that can be transmitted from wild animals to unvaccinated pets and livestock, as well as to humans. It is caused by the rabies virus, which is present in the saliva of infected animals, and is transmitted through infected secretions. The virus cannot live outside its host's body for more than a couple of seconds, but live virus has been found in animals that have been dead as long as 48 hours. Once infection occurs, the virus spreads to the central nervous system and causes inflammation in the brain (acute encephalitis). It is transmitted by viral contamination of a fresh wound, through a scratch, or through contamination of a mucous membrane (i.e., eyes, nose, mouth). Rabies kills more than 35,000 people every year, mostly in Asia, Africa, and Latin America. The current diagnosis of Rabies is not easy because the specialized technique, equipment, time & cost are required.

Specifications

- Principle: Immunochromatographic assay using Direct Sandwich Method
 - Monoclonal anti - Rabies virus (capture) - Rabies Virus - Monoclonal anti-Rabies virus (detector)
- Purpose: Detection of rabies virus antigen
- Specimen: Canine, bovine, raccoon dog's secretions of saliva, and 10% brain homogenates.
- Reading time: 5 -10 minutes
- Sensitivity: 94.4% vs. RT-PCR, 100% vs. FAT
- Specificity: 100% vs. RT-PCR, 100% vs. FAT
- No cross reaction with CDV, Pseudorabies virus, Porcine Encephalo myocarditis virus, Infectious Bovine Rhinotracheitis virus, and Japanese Encephalitis virus.
- Detection limit: $10^{1.7} LD_{50}/0.03ml$
- Shelf life: 24 months
- Storage temperature: 2~30°C
- Packing size: 10 Tests/Kit
- CAT. No.: RG18-01

Special Features

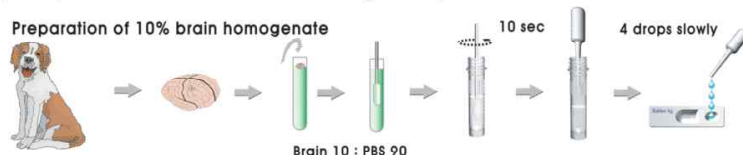
- Good detection limit:
 - Anigen Rabies Ag Test: $10^{1.7} LD_{50}/0.03ml$ - RT- PCR: $10^{0.5} LD_{50}/0.03ml$
- Good specificity (100%) and no cross reaction against other viruses
- Rapid test result : 10 minutes → It is suitable for emergency testing.
- One step testing procedure: Easy to use, Saving time and labor
- No additional equipment is required

Test Procedures

1) Test procedures with a saliva specimen



2) Test procedures with a 10% Brain homogenate specimen



Sensitivity and Specificity Study					
1. The positive samples were 10% brain homogenates, which had been originated from 7 dogs, 5 cows and 6 raccoon dogs.					
2. The negative samples were saliva, which had been swabbed from 12 cows, 29 pigs and 17 dogs					
		RT-PCR			Sensitivity: 94.4%
		Positive	Negative	Total	
Anigen Rabies Ag	Positive	17	0	17	Specificity: 100%
	Negative	1	58	59	
	Total	18	58	76	
		FAT(Fluorescent Antibody Test)			Sensitivity: 100%
		Positive	Negative	Total	
Anigen Rabies Ag	Positive	21	0	21	Specificity: 100%
	Negative	0	3	3	
	Total	21	3	24	
Cross Reaction Study					
Pathogens		Titer		Results	
Canine distemper virus		$10^{1.5} TCID_{50}/ml$		Negative	
Porcine Encephalo- myocarditis virus		$10^{1.5} TCID_{50}/ml$		Negative	
Infectious Bovine Rhinotracheitis virus		$10^{0.5} TCID_{50}/ml$		Negative	
Pseudorabies virus		$10^{0.1} TCID_{50}/ml$		Negative	
Japanese Encephalitis virus		$10^{0.1} TCID_{50}/ml$		Negative	
Leptospira canicola		OD 8.0 at 560nm		Negative	
E. coli spp.		$10^{10} CFU/ml$		Negative	
Canine coronavirus D2		$10^{11} TCID_{50}/ml$		Negative	

In 10 minutes

Rabies Ag Positive



Rabies Ag Negative

