

Avian



IBV Ab ELISA



AniGen IBV Ab ELISA is an indirect Enzyme Linked Immunosorbent Assay for the qualitative detection of antibodies against Infectious bronchitis virus (IBV) in chicken serum.

Background

Infectious bronchitis (IB) is a worldwide distributed viral disease affecting all ages of chickens. The morbidity rate is extremely high and the mortality rate is dependent on the age of the chickens when infected, and the presence of secondary invading organisms such as E. coli. It is a highly contagious disease that an entire flock can be transmitted within one or two days, through aerosol transmission (sneezing), contaminated organic material, drinking water and equipment. The target organs of the virus are the trachea and kidney for the respiratory strain and nephrogenic strain respectively. It is a financially important disease in the poultry industry because affected layers have decreased egg production and poor egg quality.

Specifications

- Principle : Indirect Enzyme Linked Immunosorbent Assay [Recombinant IBV antigen (Capture)]-[IBV antibodies in sample]-[Anti Chicken IgY-HRP detector]
- Purpose : Quantitative detection of antibodies against Infectious bronchitis virus
- Specimen : Serum
- Reading time : 75 minutes
- Sensitivity : 98.8% (395/400)
- Specificity : 97.8% (133/136)
- No cross reaction with AIV, IBDV, NDV, Mycoplasma
- Shelf life : 12 months
- Storage temperature : 2~8°C
- Packing size : 96 Tests/Kit, 480 Tests/Kit, 960 Tests/Kit

Special Features

- Easy test procedure : No sample dilution required
- High sensitivity and specificity
- Fast test result : within 75 minutes
- Optimal screening method of IBV in carrier

Quick Procedure

1. Prepare IBV antigen coated test plate
2. Dilute test sample with sample diluents. Do not dilute controls
3. Add 100 μ l of the UNDILUTED controls into wells
4. Add 100 μ l diluted sample to wells
5. Incubate the wells at room temperature (18~25°C) for 30 minutes
6. Wash the wells at 5 times
7. Add 100 μ l of enzyme conjugate to each well
8. Repeat 5 and 6 procedure
9. Add 100 μ l of substrate solution to each well and incubate the wells for 15 \pm 1 minutes at room temperature (18~25°C)
10. Add 100 μ l of stopping solution
11. Read the absorbance of the wells with a bichromatic spectrophotometer at 450nm with reference wavelength at 620nm
12. S/P value = $\frac{[OD \text{ samples} - OD \text{ of negative control}]}{[OD \text{ positive control} - OD \text{ of negative control}]}$

Performance study

Anigen IBV Ab ELISA	IBV strain inoculation to vaccinated chickens					
	DPI 0	DPI 5	DPI 7	DPI 10	DPI 14	DPI 18
	0%	0%	42%	88%	100%	100%

*Tested group : 18 chickens *Control group : 4 chickens