

NDV velo Ab ELISA

AniGen NDV Velo Ab ELISA is an Indirect Enzyme Linked Immunosorbent Assay for the qualitative detection of antibodies against Velogenic Newcastle disease virus in avian serum or plasma



CAT.No.: EB45-01

Newcastle disease is a contagious bird disease affecting many domestic and wild avian species. NDV strains can be categorised as velogenic (highly virulent), mesogenic (intermediate virulence) or lentogenic (nonvirulent). Velogenic strains produce severe nervous and respiratory signs, spread rapidly and cause up to 90% mortality. Mesogenic strains cause coughing, affect egg quality and production and result in up to 10% mortality. Lentogenic strains produce mild signs with negligible mortality.

In acute cases, the death is very sudden, and, in the beginning of the outbreak, the remaining birds do not seem to be sick. In flock with good immunity, however, the signs (respiratory and digestive) are mild and progressive, and are followed after 7 days by nervous symptoms, especially twisted heads.

- Principle: Indirect Enzyme Linked Immunosorbent Assay [Recombinant NDV antigen (Capture)]-[velogenic NDV antibodies in sample]-[Anti Avian IgG-HRP detector]
- Purpose: Qualitative detection of antibodies against Velogenic Newcastle disease virus
- Specimen: Serum or plasma
- Reading time: 105 minutes
- Sensitivity: 95.0%
- Specificity: 98 %
- Shelf life: 12 months
- Storage temperature: 2~8°C
- Packing size: 96 Tests/kit, 480 Tests/kit, 960 Test/ kit

- Differential test of Velogenic strain and other strains
- The first ELISA test kit for detection of antibodies against velogenic NDV virus
- Simple test procedure
- High sensitivity and specificity
- Fast Test result: Within 2 hours

1. Prepare NDV velo antigen coated test plate
2. Dilute test sample and control with sample diluents
3. Add 100ul of diluted sample and control to wells
4. Incubated plated for 60 minutes at room temperature.
5. Wash plate 5 times
6. Add 100ul of enzyme conjugate to wells
7. Add 100ul of substrate solution and incubated for 30 minutes at room temperature
8. Add 100ul of stop solution
9. Measure the optical density (OD) at 450 nm with reference wavelength at 620nm
10. $S/P \text{ value} = \frac{[OD \text{ sample} - \text{mean OD negative}]}{[\text{mean OD positive} - \text{mean OD negative} \times 100]}$

ELISA

	NDV Velogenic strain inoculation to vaccinated chickens					
	DPI 0	DPI 5	DPI 7	DPI 10	DPI 14	DPI 18
AniGen NDV Velo Ab ELISA	0%	33%	70%	58%	25%	25%

* Test group: 12 chickens * Control group: 3 chickens

It is almost not possible to study sensitivity because there are no commercial tests or method confirmed for detection of the antibody by NDV strains.