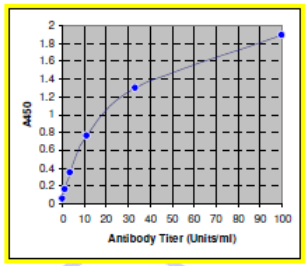
DATA SHEET

Chicken Anti-Newcastle Disease Virus (NDV) IgG ELISA Kit, Cat# 920-140-NDV

Chicken Anti-**NDV** Ig's ELISA kit | Quantitative | **Stds** = 0-100 U/ml | **Sample**=100 ul (diluted); **105 min** assay | Sensitivity ~1 U/ml



First Quantitative Kit to measure Anti-NDV IgG in chickens

All other kits are –ve and +ve only.

Chicken Anti- Newcastle Disease Virus (NDV) ELISA Kit Features

- Chicken NDV virus antigen Pre-coated, stabilized, ready-to-use 96-well strip plate, suitable for multiple runs over 6-9 months.
- Convenient liquid Stds (Chicken anti-NDV IgG: 0-100 U/ml) and –ve control.
- Sensitivity ~1 U/ml; 100ul samples; 1:100-1-200 or more
- 105 minute, 2 incubation step, room temp assay
- Contains all necessary reagents.
- Adaptable to measure anti-NDV in Egg Yolk without any IgG/Y purification

This kit is for measuring anti-NDV IgG in Chicken serum or plasma samples. For in vitro research use only.

Assay Procedure: Allow all reagents to reach room temperature. Arrange and label required number of strips.

Step 1. Pipet **100 ul each of pre-diluted standards**, samples containing anti-NDV (diluted as required) and controls into wells. Mix gently and incubate at room temperature for **60 min.**

Step 2. **Aspirate and wash** the plate four times. **Add 100ul of Anti-Chicken IgG-HRP** Conjugate to all wells, mix gently and incubate at room temperature for **30 min.**

Step 3. **Aspirate and wash** the plate five times. Add **100 ul of TMB Substrate** solution to all wells, mix gently, and incubate at room temperature for **15 min.**

Step 4. Pipet **100 ul of stop solution** into each well and mix gently (blue color turns yellow). **Measure OD at A450 nm**. Calculate concentration of anti-PA83 IgG in each sample using the anti-NDV IgG Standard curve.

General Information

Newcastle disease is a highly contagious zoonotic bird disease affecting many domestic and wild avian species. Its effects are most notable in domestic poultry due to their high susceptibility and the potential for severe impacts of an epidemic on the poultry industries. It is endemic to many countries. Newcastle Disease was discovered in Newcastle upon Tyne, England in 1926 (Doyle), but also at this time slightly different strains were found in other parts of the world. Exposure of humans to infected birds (for example in poultry processing plants) can cause mild conjunctivitis and influenza-like symptoms, but the Newcastle disease virus (NDV) otherwise poses no hazard to human health. Interest in the use of NDV as an anticancer agent has arisen from the ability of NDV to selectively kill human tumour cells with limited toxicity to normal cells. No treatment for NDV exists, but the use of prophylactic vaccines and sanitary measures reduces the likelihood of outbreaks

The causal agent, Newcastle disease virus (NDV), is a negative-sense single-stranded RNA virus. Transmission occurs by exposure to faecal and other excretions from infected birds, and through contact with contaminated feed, water, equipment and clothing. NDV strains can be categorized 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.

Torticollis in a mallard with Newcastle Disease signs of infection with NDV vary greatly depending on factors such as the strain of virus and the health, age and species of the host. They can include respiratory signs (gasping, coughing), nervous signs (depression, inappetence, drooping wings, paralysis), swelling of the eyes and neck, diarrhoea, misshapen, rough- or thin-shelled eggs and reduced egg production. Any animals that are showing symptoms of Newcastle Disease should be quarantined immediately. New birds should also be vaccinated before being introduced to your flock. There is an inactivated viral vaccine (ATCvet code: QI01AA02) and a live vaccine (ATCvet code: QI01AD06) available, as well as various combination vaccines.

ADI is the first company to develop ELISA kits to accurately quantitate or measure anti-NDV IgG in chickens. The screening can be performed before or after vaccination. A great feature of the new ELISA kit is that anti-NDV IgGs can be assessed in whole egg yolk without any processing or purification of the egg yolk.

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