

Rapid Test Kit H5 AIV Ag

Highpathogenic H5 AIV Infection or Not!

CAT. No.: RG15-05



Anigen Rapid H5 AIV Ag Test Kit is a solid phase chromatographic immunoassay for the qualitative detection of avian influenza type A subtype H5 virus antigen (High pathogenic avian influenza virus: HPAI) in avian cloaca swab, trachea swab, kidney swab and feces.

Background

Avian influenza A viruses can be classified into low and high pathogenic forms based on the severity of the illness they cause. Avian influenza A subtype H5 and subtype H7 viruses can be distinguished as "high pathogenic" form on the basis of genetic features of the virus and the severity of the illness. Avian influenza A subtype H5 potentially has nine different subtypes (H5N1 ~ H5N9) and these subtypes can be highly pathogenic (HPAI) or low pathogenic (LPAI). The Influenza type A subtype H5 infection has been reported among humans and sometimes causing severe illness and death.

Specifications

- Principle: Immunochromatographic assay using Direct Sandwich Method
 - Monoclonal anti-AIV H5 (Capture) – AIV H5 – Monoclonal anti-AIV H5 (Detector)
 - Monoclonal antibody against subtype H5 specific protein of avian influenza virus
- Purpose: Detection of Avian influenza type A subtype H5 virus (H5N1 ~ H5N9)
- Specimen: Avian cloaca, trachea, kidney swab and feces
- Reading time: 5~10 minutes
- Sensitivity: 100% by farm (n=13), 76.6% by feces (n=115) vs. Virus isolation
- Specificity: 100% vs. Virus isolation, PCR (n=1,402)
- No cross reaction against NDV, IBV, ILTV, Pneumovirus, Reovirus, IBDV, MDV, and REV
- Detection limit: $10^{4.9}$ EID₅₀/ml or 0.125 HAU
- Shelf life: 24 months
- Storage temperature: 2~30°C
- Packing size: 25 Tests/Kit
- The Pigeons have very low possibility of AIV infection and the specimens from pigeon feces may show unusual result in the kit. To test the pigeon feces, Choose Anigen pigeon feces preparation kit that is commercially available.

Independent Comparison Study

Virus	Anigen H5 ICT	"BN" Flu A ICT
A/Chicken/Vietnam #8 (γ-irradiated) – A(H5N1)	Positive	Positive
A/Duck/Vietnam #7A (γ-irradiated) – A(H5N1)	Positive	Positive
A/?/Vietnam #Pooled (γ-irradiated) – A(H5N1)	Positive	Positive
A/Human/New Caledonia6/2002 – A(H3N2)	Negative	Positive
A/Human/Ulan Ude/1/2001- A(H3N2)	Negative	Positive

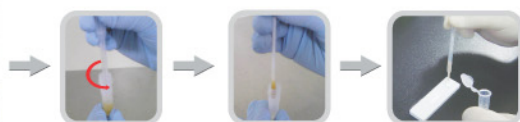
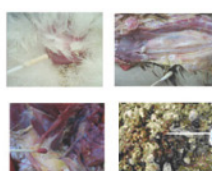
(*ICT: Immunochromatographic test)

Name of the farm infected with HPAI	Species	No. of random specimen	Anigen H5 ICT No. of Positive result
1. LKB	Egg Layers	3	2
2. KJT	Egg Layers	3	2
3. SKU	Egg Layers	3	1
4. SWS	Egg Layers	3	2
5. CMK	Egg Layers	5	5
6. STB	Egg Layers	6	6
7. KBK	Egg Layers	7	5
Total	Positive rate by Farms 7/7(100%) Positive rate by Specimens: 23/28(82.1%)		

Special Features

- Optimal screening method of High pathogenic AIV subtype H5 in the farm or laboratory
- Detection of all avian influenza subtype H5 viruses (H5N1 ~ H5N9)
- High sensitivity compared with the virus isolation method
- High specificity: No cross-reaction with other avian viruses
- Detection of AIV H5 in Chickens, Ducks, Turkeys, and Geese
- World's first commercialized rapid test kit for detection of avian influenza virus subtype H5 since December 2003
- Easy test procedure: No technical expertise required, and Saving Labor & Time
- No additional equipment is required.
- Anigen AIV Ag test can be performed for initial screening, and Anigen H5 AIV Ag test for second line screening, HPAI subtype H5.

Test Procedures



In 5~10 minutes

2 lines: High pathogenic AIV H5 Positive



1 line: AIV H5 Negative



1. Collect a cloaca feces swab, traceal swab, kidney swab or scattered wet feces swab.
2. Dilute the swab sample with assay diluent and drop 4 drops.
3. Interpret the test result.