Anigen Animal Genetics, Inc.

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World First & Sole H5 AIV Differential Test

ANIGEN Rapid H5 AIV Ag Test Kit

Catalogue 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 swabs and faeces.

■ 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" forms 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 infections have been reported among humans, 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 swab or faeces
•Reading time: 20 minutes
•Sensitivity: 90.9% vs. Virus isolation, 91.6% vs. PCR
•Specificity: 99.9% vs. Virus isolation, PCR
•No cross reaction against NDV, IBV, ILTV, Pneumovirus, Reovirus, IBDV, MDV, REV
•Detection limit: $10^{5.5}$ EID_{50}/ml or 1 HAU
•Shelf life: 12 months
•Storage temperature: 2~30 'C
•Packing size: 25 Tests/Kit

■ 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 to the virus isolation method
- High specificity: No cross-reaction with other avian viruses
- Detection of AIV H5 in Chicken, Duck, Turkey, Goose
- World first commercialised rapid test kit for detection of avian influenza virus subtype H5 since December 2003
- Easy test procedure: No technical expertise required, Labour & Time saving.
- Fast test result: 20 minutes.
- No additional equipment is required.
- Initial screening can be performed with the Anigen AIV Ag Test and then second line screening for HPAI subtype H5 with the Anigen H5 AIV Ag Test.

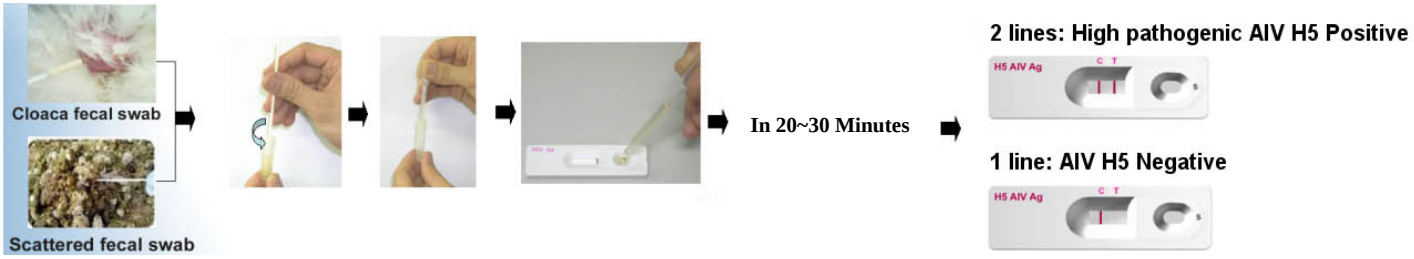
Independent Comparison Study

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%)**		

■ Test Procedures



1. Collect a cloaca swab of faeces 2. Dilute the swab sample with assay diluent and drop 4 drops