

## Avian

# AIV / H5 AIV Ag

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



CAT.No.: RG15-06

## Background

Influenza viruses that infect birds are called "Avian Influenza virus (AIV)" with only influenza type A viruses infecting birds. Influenza type A viruses are divided into subtypes based on two proteins, hemagglutinin (HA) and neuraminidase (NA), on the surface of the virus. Avian influenza A viruses can be classified into low pathogenic and high pathogenic forms based on the severity of the illness they cause. The subtype H5 and subtype H7 viruses of Avian influenza A viruses can be distinguished as "high pathogenic" forms on the basis of genetic features of the virus and the severity of the illness. The AIV subtype H5 is potentially nine different subtypes (H5N1 ~ H5N9) and these subtypes can be highly pathogenic (HPAI) or low pathogenic (LPAI). The AIV subtype H5 infections have been reported among humans, sometimes causing severe illness and death.

## Specification of AIV type A detection

- Principle: Immunochromatographic assay using Direct Sandwich Method
- Monoclonal anti-AIV (Capture) - AIV Type A - Monoclonal anti-AIV
- Monoclonal antibody against Type A specific nucleoprotein of Avian influenza virus
- Purpose: Detection of Avian influenza type A virus (H1~H16)
- Specimen: Avian cloaca, trachea, kidney or feces swab
- Sensitivity: 99.9% vs. HA, ELISA, 77.3% by feces vs. virus isolation
- Specificity: 99.9% vs. HA, PCR
- No cross reaction against NDV, IBV, ILTV, Pneumovirus, Reovirus, IBDV, MDV, REV
- Detection limit: 103.1 EID<sub>50</sub>/ml
- Reading time: 5~10 minutes

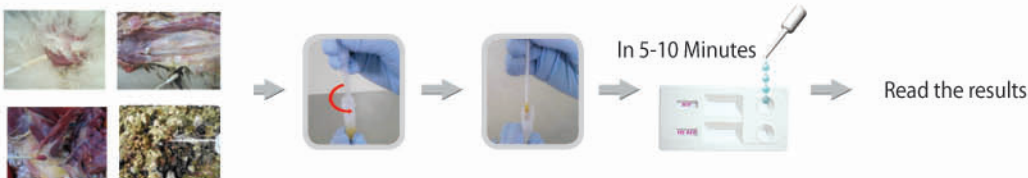
## Specification of AIV subtype H5 detection

- Principle: Immunochromatographic assay using Direct Sandwich Method
- Monoclonal anti-AIV H5 (Capture) - AIV H5 - Monoclonal anti-AIV H5
- 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 or feces swab
- Sensitivity: 100% by farm (n=13), 76.6% by feces vs. Virus isolation
- Specificity: 100% vs. Virus isolation, PCR
- No cross reaction against NDV, IBV, ILTV, Pneumovirus, Reovirus, IBDV, MDV, REV
- Detection limit: 104.5 EID<sub>50</sub>/ml or 0.06 HAU
- Reading time: 5~10 minutes

## Special Features

- Optimal screening method of AIV Type A and High pathogenic subtype H5 in the field, laboratory
- High Sensitivity comparing with the virus isolation method
- High specificity: No cross-reaction with other avian viruses.
- Detection of AIV A and H5 in Chicken, Duck, Turkey, Goose
- World first commercialized rapid test kit for detection of avian influenza virus A and H5
- Easy test procedure: No technical expertise required and Labor & Time saving. No additional equipment is required.
- Fast Result : Result comes out within 5~10 minutes.
- Simultaneously AIV screening and HP AI subtype H5
- Shelf life : 24 months, -Storage temperature : 2~30°C
- Catalogue No.: RG 15-06

## Test Procedures



## Interpretation of the test result

### 1) Negative Result



### 2) AIV Type A Positive Result



### 3) AIV H5 Positive Result



### 4) Invalid Result

