



# RapiGEN AIV+AIV H5 Combo Ag Test

Cat No. VR0142/ VR0143

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## Introduction

Avian influenza (AI) is a viral disease affecting the respiratory, digestive and/or nervous system of many species of birds. There are 15 haemagglutinin and 9 neuraminidase subtypes of avian influenza A virus (AIV), giving rise to hundreds of variations on the 'HxNy' combination. Highly pathogenic avian influenza virus H5N1 strains among AIV spread very rapidly through poultry flocks, cause disease affecting multiple internal organs, have a mortality that can approach 100%, and affect human life seriously.

RapiGEN AIV and AIV H5 Ag Combo test kit is a solid phase chromatographic immunoassay with highly specific monoclonal antibody against the haemagglutinin of AIV H5 strains and the highly conserved nucleocapsid protein of AIV type A. This kit has been found to identify and differentiate AIV and AIV H5 antigens in avian cloaca, trachea and ground feces with a high degree of accuracy.

## Specifications

- Principle: immunochromatographic assay Gold conjugate; anti- AIV and Anit-AIV H5 Test line detector; anti- AIV and Anit-AIV H5
- Detection; Avian influenza type A virus (H1~H15) and AIV subtype H5
- Specimen: avian cloaca, trachea and ground feces
- Sensitivity:  
AIV; 100% by farm (3/3), 82% by individual (83/97)  
AIV H5; 100% by farm (3/3), 82% by individual (79/97)
- Specificity: **AIV: 99.1% (2/243), AIV H5: 99.6 (1/243)**
- No cross reaction: NDV, IBV, IBDV, Mycoplasma and E.coli
- Detection limit: 0.125 HAU (Hemagglutination Unit)
- Detection time; 20-30 minutes
- Shelf life: 18 months
- Storage temperature: 2~30°C
- Packing size: 10 multi-device x 3 Tests/Kit and 20 mono-device Tests/Kit

## Features

- It is recommended to test 10 birds shown strong symptom in AIV suspected flock
- Smart sample collection tube; Simple sample collection and experiment, Protection of human, animal and environment from contamination with putative infectious agents
- Quick screening of AIV and/or AIV H5 in the field or laboratory without additional equipment and technical skill
- High sensitivity even in duck farm
- Detection of avian influenza type A viruses (H1~H15) of and/or specific AIV H5
- Saving labor and time
- High specificity to other avian virus and bacteria.

**Table 1.** The comparison study of specimens from duck farm confirmed infection by avian influenza H5 virus with RT-PCR method

Farm	RapiGEN AIV+AIV H5 Ag test					
	Trachea		Cloaca		Feces	
	AIV	H5	AIV	H5	AIV	H5
Farm No 1	14/16	14/16	22/24	23/24	3/6	3/6
Farm No 2	10/13	8/13	13/16	13/16	8/9	8/9
Farm No 3	3/4	3/4	3/4	3/4	4/5	4/5
Specificity	AIV: 100% by farm (3/3), 82% by individual (83/97) AIV H5: 100% by farm (3/3), 82% by individual (79/97)					

**Table 2.** The Comparison study of specimens from healthy chicken and duck species.

Specimen	RapiGEN AIV+ AIV H5 Ag test		RT-PCR	
	AIV	H5	AIV	H5
Trachial	0/81	0/81	0/81	0/81
Cloacal	0/81	0/81	0/81	0/81
Ground feces	2/81	1/81	0/81	0/81
Specificity	AIV: 99.1% (2/243), AIV H5: 99.6 (1/243)			

## Procedures

