

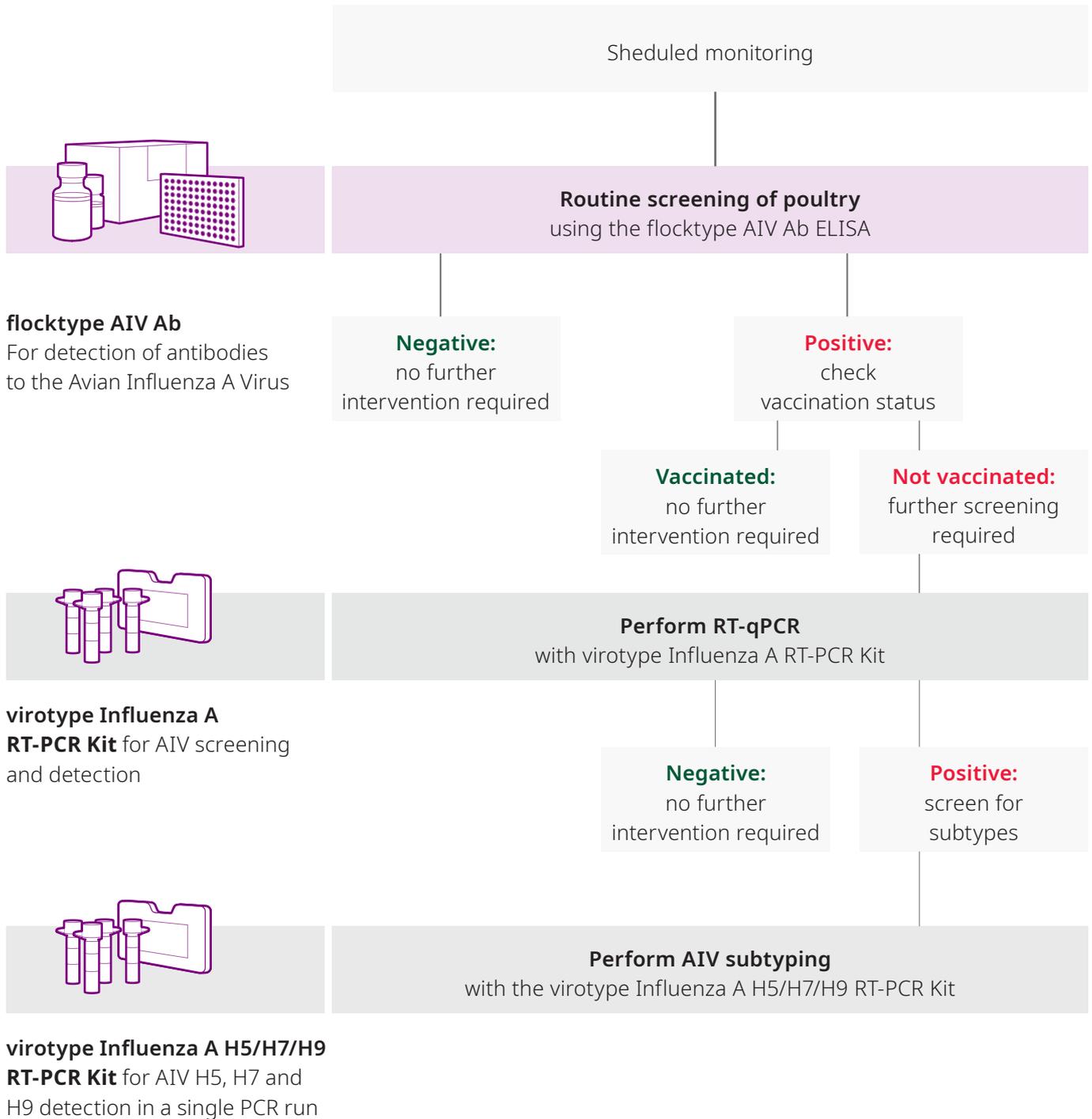
# Love birds?

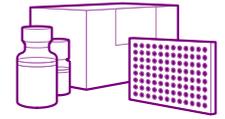
Ensure early and accurate diagnosis  
of Avian Influenza A Virus infection



# Get reliable answers for Avian Influenza control – Make fully informed decisions every step of the way

Discover our tests for rapid and reliable isolation and identification of the Influenza A Virus as well as early detection of specific antibodies to the Avian Influenza A Virus. INDICAL offers ELISA and RT-qPCR solutions delivering reliable results at every step of the screening workflow.





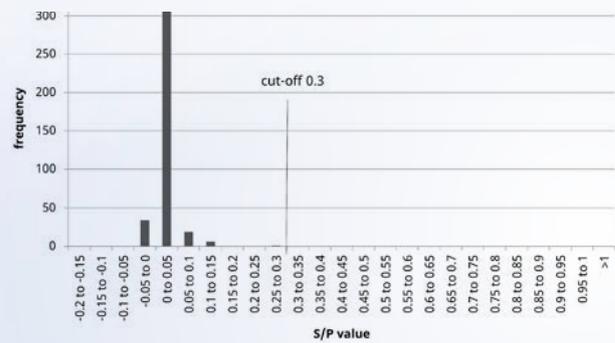
# Screen for antibodies to the Avian Influenza A Virus

Developed for surveillance and vaccine compliance testing, the flocktype AIV Ab (FLI-B 435) is a screening ELISA for specific and sensitive detection of antibodies to Avian Influenza A Virus in serum and plasma samples from poultry, including chickens and turkeys.

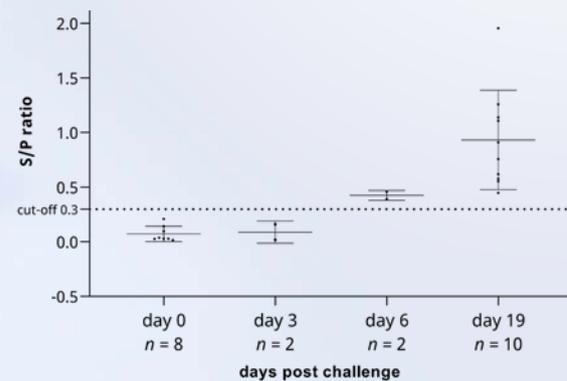
- High sensitivity of 100%\*
- High specificity of 96.8%\*
- User-friendly with ready-to-use, colored reagents
- Full results in 1.5 hours

\* Sensitivity and specificity of the kit determined with  $n = 104$  AIV antibody-positive and  $n = 432$  AIV antibody-negative samples:

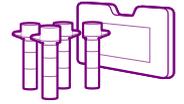
## INDICAL's flocktype AIV Ab ELISA delivers early antibody detection from day 6 after infection



**Figure 1a:** Distribution of  $n = 371$  AIV antibody-negative field sera (pre-selected on their negative test result in a competitor's ELISA). **Conclusion:** 100% specificity for AIV-antibody negative field sera.



**Figure 1b:** Course of seroconversion after vaccination and subsequent challenge with an AIV H7N1 strain. **Conclusion:** Antibodies to AIV H7N1 are detected from day 6 post challenge. Therefore, the flocktype AIV Ab is a reliable tool for early detection of AIV-specific antibodies.



# Confirm the presence of Influenza A Virus subtypes in screening and surveillance programs

In under 2 hours, detect the RNA of the currently known 16 HA and 9 NA subtypes, including the highly pathogenic H5N8. INDICAL's virotype Influenza A RT-PCR Kit (FLI-B 538) is a ready-to-use test including everything you need to detect Influenza A Virus RNA in samples from birds, pigs and equids.

- Successfully validated and approved by reference laboratories worldwide (e.g. FLI - OIE, FAO and NRL for Avian Influenza (AI) in Germany and CSIRO, Australia)
- Proven performance in reference and screening labs during outbreaks
- Up-to-date bioinformatics-based qPCR assay design

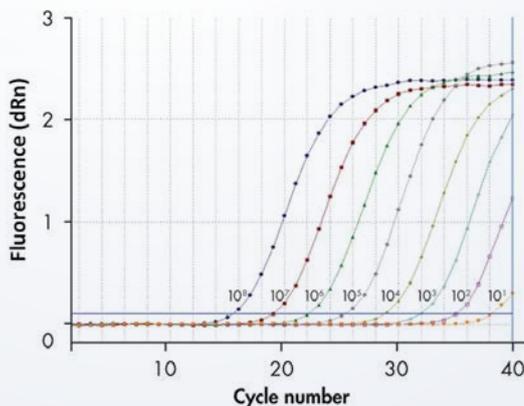
## Flexible with multiple validated sample types

**Birds:** fecal samples, tissue samples, and individual or pooled oropharyngeal, tracheal and cloacal swabs

**Swine:** nasal swabs, bronchoalveolar lavage fluid and tissue samples

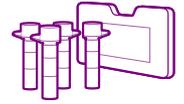
**Equids:** nasal swabs

- Suitable for sample types of 10 swabs
- Easy-to-use single reaction mix with endogenous internal extraction and amplification control
- Ready-to-use positive and negative controls
- Detection of as few as 10 copies per sample



**Figure 2.** INDICAL's virotype Influenza A RT-PCR Kit can detect as few as 10 copies per sample by testing a titration series of Influenza A in vitro RNA on Agilent Mx3005P. The graph shows the combined analysis of triplicates.



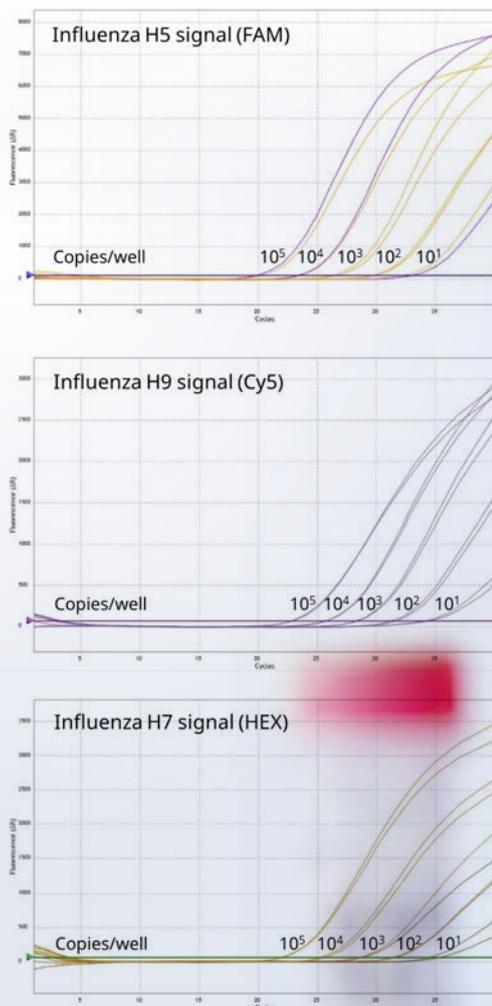


# Detect and differentiate Avian Influenza H5, H7 and H9 in one cyclor run

Ensure you can detect all the currently circulating European, Asian and North American H5, H7 and H9 strains and clades. The virotype Influenza A H5/H7/H9 RT-PCR Kit is a multiplex RT-qPCR test for identifying and differentiating the pathogenic Avian Influenza A Virus subtypes H5 and H7 as well as subtype H9 in a single cyclor run.

- Designed for samples from chickens, turkeys and wild birds
- Ultra-fast protocol with a run time just over 1 hour
- Highly sensitive detection of as few as 10 copies per sample
- RT-qPCR mix including an exogenous control
- Ready-to-use positive and negative controls
- Usable on most common PCR thermocyclers
- High efficiency on all instruments tested

## Excellent performance



**Figure 4.** The virotype Influenza A H5/H7/H9 RT-PCR Kit detected at least 10 RNA copies for each subtype H5, H7, H9 copies per sample with a correlation coefficient  $\geq 0.999$ .



# Get the best results in downstream testing with the right start

Our sample pretreatment protocols, extraction kits and instruments for nucleic acid isolation are suitable for both high- and low-throughput workflows.

## INDICAL pretreatment protocols

Some sample types need pretreatment to give the best results. Our recommended protocols for swabs (S), tissue (T) or feces (F) are freely available to our customers. Please contact: [support@indical.com](mailto:support@indical.com)

## IndiMag and IndiSpin nucleic acid extraction kits and cartridges

Extract the highest yield and quality of RNA from your samples using your preferred method and instrument.

The IndiMag Pathogen Kit is for magnetic bead-based extraction of viral and bacterial DNA and viral RNA on the IndiMag 48s, KingFisher Flex and equivalent instruments. It is available with or without plasticware for the KingFisher Flex; as well as in a new configuration with prefilled reagent cartridges to save operator time and reduce the risks of human error and contamination. The kits are designed for highly flexible throughputs and deliver PCR-ready nucleic acids.

The IndiSpin Pathogen Kit is for silica membrane technology-based extraction of viral and bacterial DNA and viral RNA on the QIAcube and equivalent instruments.

## IndiMag 48s

Increase the flexibility of your nucleic acid extraction workflows with our compact, versatile and easy-to-use instrument, the IndiMag 48s. Based on magnetic bead technology, it offers:

- Fast results, processing up to 48 samples in 30 minutes
- Pre-loaded protocols for IndiMag kits
- Open software for easy protocol customization
- Effective decontamination using UV light
- Optimized plastics use with 3 flexible cartridge formats



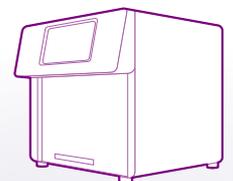
## Sample extraction



Cat. no. (number of preps)

Product	Short description	S	M	L
IndiMag Pathogen Kit	Extraction of viral RNA/DNA and bacterial DNA based on magnetic bead technology. Designed for the KingFisher Flex and equivalent instruments. <i>All-in-one box: reagents and plasticware for KingFisher Flex</i>			SP947457 (384)
BioSprint 96 One-For-All Vet Kit	Extraction of viral RNA/DNA and bacterial DNA based on magnetic bead technology. Designed for the KingFisher Flex and equivalent instruments. <i>All-in-one box: reagents and plasticware for KingFisher Flex</i>			SP947057 (384)
IndiMag Pathogen Kit w/o plastics	Extraction of viral RNA/DNA and bacterial DNA based on magnetic bead technology. Designed for the IndiMag 48, IndiMag 48s, and/or KingFisher Flex and equivalent instruments.			SP947257 (384)
<b>NEW!</b> IndiMag Pathogen IM48 Cartridge	Prefilled reagent cartridges for automated extraction of viral RNA/DNA and bacterial DNA based on magnetic bead technology. Designed for the IndiMag 48 and IndiMag 48s.	SP947654P608 (6 x 8)	SP947654P224 (2 x 24)	
<b>NEW!</b> IndiMag Pathogen KF96 Cartridge	Prefilled reagent cartridge for automated extraction of viral RNA/DNA and bacterial DNA based on magnetic bead technology. Designed for the KingFisher Flex and equivalent instruments.		SP947855P196 (1 x 96)	
IndiSpin Pathogen Kit	Extraction of viral RNA/DNA and bacterial DNA based on silica membrane technology.	SP54104 (50)	SP54106 (250)	
IndiSpin QIAcube HT Pathogen Kit	Extraction of viral RNA/DNA and bacterial DNA based on silica membrane technology. Designed for the QIAcube HT.			SP54161 (480)
virotype Tissue Lysis Reagent	Fast lysis of various sample types		SP289992 (100 mL)	SP289993 (250 mL)

## Instruments



Product	Short description	Cat. no.
IndiMag 48s	Automated system for rapid extraction of nucleic acids using magnetic bead technology	IN943048s
<b>NEW!</b> IndiMag 48s Service Solutions	Extended warranty for 2–4 years to ensure maximum productivity and instrument uptime. For further details, please contact us.	IMG48SERV

## Assays



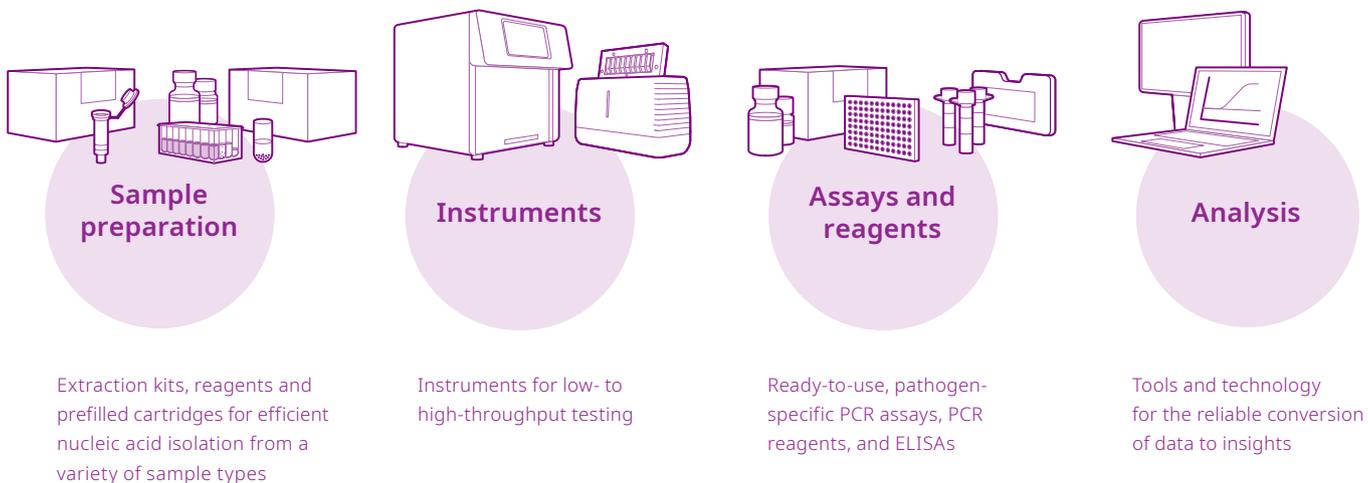
Cat. no. (number of PCR reactions/ELISA plates)

Pathogen investigated	Product	Technology	S	M	L
Influenza A Virus	virotype Influenza A RT-PCR Kit	RT-qPCR	VT282603 (24)	VT282605 (96)	
Influenza A Virus	<b>NEW!</b> virotype Influenza A H5/H7/H9 RT-PCR Kit	RT-qPCR (Multiplex)		VT282705 (96)	
Influenza A Virus	flocktype AIV Ab	ELISA	FT274012 (2)		

# INDICAL provides solutions for your entire workflow

With over two decades of experience, INDICAL is a leading provider of diagnostic workflows, associated protocols, and expert technical support. We are committed to protecting animal and human health by enabling our customers to reliably identify animal diseases.

We have a high production capacity and maintain considerable safety stocks. Our team of experienced veterinarians, biologists, and application specialists stand ready to answer your questions and help you customize protocols and troubleshoot even the most challenging samples.



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