

## VIROTYPE® Influenza A

REAL-TIME RT-PCR TEST KIT FOR SAFE DETECTION OF THE INFLUENZA A VIRUS IN AVIAN AND PORCINE SAMPLES

The Influenza A virus occurs in high genetic diversity and a wide range of virulence.

While the subtypes H5 and H7 of the Influenza A virus cause fowl plague in domestic poultry with high economic losses, the subtypes H1N1, H1N2 and H3N2 can cause infections of the respiratory tract in swine.

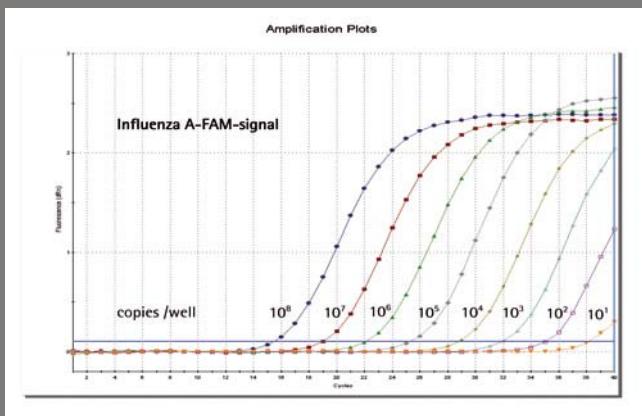
**VIROTYPE® Influenza A by LDL enables fast and easy detection of Influenza A virus from:**

**Birds:** Oropharyngeal, tracheal, fecal- and tissue samples, cloacal swabs (individual or pools of up to 10 individual swabs), supernatant of cell culture

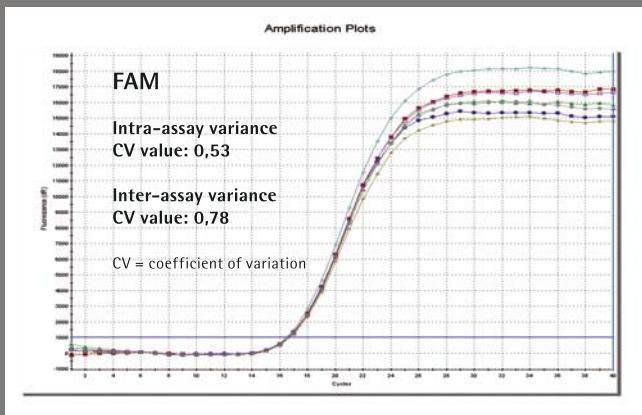
**Swine:** Nasal swabs (individual or pools of up to 10 individual swab samples), bronchoalveolar lavage fluid (BALF) and tissue samples, supernatant of cell culture

### VIROTYPE® Influenza A product advantages at a glance:

- Detects all 16 HA- and 9 NA subtypes of Influenza A virus including the pandemic A/H1N1 (2009) Influenza A virus
- Single-tube/one-step procedure
- Easy to use: Simply add sample RNA directly to VIROTYPE® Influenza A mix and start cycler
- Internal control of sample extraction and amplification included
- Highly reliable test results in less than 2 hours
- VIROTYPE® Influenza A can also be performed together with VIROTYPE® BTV PLUS, BVDV and CSFV test kits by LDL in one cycler run
- Approved by *Friedrich-Loeffler-Institute (FLI)* for pools of up to 10 individual swab samples



**Detection range:** VIROTYPE® Influenza A detects 10 copies per sample (see figure above).



**High reproducibility:** VIROTYPE® Influenza A shows excellent CV values (see figure above).

**High specificity:** VIROTYPE® Influenza A detects all HA- and NA subtypes of the Influenza A virus.

Influenza A avian strains	HA-subtype	NA-subtype	In-house FLI-PCR Ct	VIROTYPE® Influenza A Ct
A/wild duck/Germany/R30/06	H1	N1	23,57	20,87
A/duck/Potsdam/177/83	H2	N2	22,84	19,70
A/duck/Ukraine/1/63	H3	N8	20,08	18,72
A/mallard/Germany/1507/07	H4	N6	24,77	21,50
A/duck/Potsdam/1402/86	H5	N2	24,62	21,59
A/turkey/Grub/R41/98	H6	N5	22,51	19,91
A/swan/Potsdam/62/81	H7	N3	23,98	21,30
A/turkey/Ontario/6118/68	H8	N4	24,11	21,09
A/chicken/Germany/90/95	H9	N2	25,89	23,51
A/guinea fowl/Hungary/1/69	H10	N8	24,24	21,73
A/mallard/Germany/R2994/07	H11	N9	19,16	16,59
A/duck/Alberta/60/76	H12	N5	23,60	20,99
A/gull/Stralsund/Wv1136-40/03	H13	N6	28,59	24,36
A/mallard/Gurev/263/82	H14	N5	24,69	21,55
A/shearwater/W.Australia/2576/79	H15	N9	21,08	18,45
A/herring gull/Germany/R2792/06	H16	N2	30,48	25,39

Influenza A strains	HA-subtype	NA-subtype	VIROTYPE® Influenza A Ct-FAM
human H1N1 (new flu)	H1	N1	29,43
swine H1N1	H1	N1	15,20
swine H1N2	H1	N2	16,20
swine H3N2	H3	N2	10,20

Panel of avian strains comprising 16 HA and 9 NA subtypes of the Influenza A virus was kindly provided by Prof. T. Harder of the German NRL for AIV (*Friedrich-Loeffler-Institute*). For further information please contact us and ask for our data package.

**LDL – Labor Diagnostik GmbH Leipzig**  
Deutscher Platz 5b | 04103 Leipzig  
Deutschland (Germany)  
Phone: +49 341/124 54 0  
Fax: +49 341/124 54 60  
E-Mail: info@lab-leipzig.de  
Website: www.lab-leipzig.de

VIROTYPE® Influenza A Real-time RT-PCR test kit (FLI-B 538)		
PCR test kit with	25 reactions	Cat. Nr. 05-301/25
PCR test kit with	96 reactions	Cat. Nr. 05-301/96
PCR test kit with	480 reactions	Cat. Nr. 05-301/480

