



Infectious Bronchitis Virus and Avian Coronaviruses

Detection and Differentiation with Kylt® Real-Time RT-PCR

Infectious Bronchitis Virus (IBV) is one of the most important avian Coronaviruses (aCoV) causing severe diseases with a high clinical relevance in broilers, layers and breeders. A number of variants of IBV exist that differ in their antigenicity and pathogenicity. Vaccination schemes typically comprise a mix of different variants, since cross-protection is limited between certain variants. Therefore, detection of specific variants present in a flock is a highly beneficial complementation of clinical management and diagnostics of IBV.

Kylt® offers a variety of products for the detection of avian Coronaviruses and differentiation of IBV variants:

- **Kylt® IB-aCoV** simultaneously detects all avian Coronaviruses including IBV and Turkey Coronavirus (TuCV) and is suitable for the analysis of swab samples as well as tissues and organs. The included Internal Control is amplified in every reaction.
- **Kylt® IBV-variant specific Detection Products** are suitable for the analysis of samples from tissues and organs as well as swab samples of the aforementioned. Kylt® IBV-variant specific Detection Products are available for a number of different variants:
 - IBV Variant Arkansas
 - IBV Variant D1466
 - IBV Variant D274
 - IBV Variant Italy O2
 - IBV Variant Massachusetts
 - IBV Variant QX
 - IBV Variant 793b (4/91 / CR88)
 - IBV Variant O2 (Israel O2 / IS 1494)
 - IBV Variant Q1
 - IBV Variant IB80

All products can also be applied on samples derived from cultural processes, such as allantoic fluid from embryonated eggs or cell culture harvest.

Tested Parameter	Reactions	Article No.
Infectious Bronchitis Virus and further avian Coronaviruses, incl. TuCV (IB-aCoV)	100 / 25	31193 / 31194
Infectious Bronchitis Virus - Variant 4/91 / 793B / CR88	100 / 25	31082 / 31083
Infectious Bronchitis Virus - Variant Massachusetts	100 / 25	31084 / 31085
Infectious Bronchitis Virus - Variant D274	100 / 25	31086 / 31087
Infectious Bronchitis Virus - Variant Arkansas	100 / 25	31088 / 31089
Infectious Bronchitis Virus - Variant Italy02	100 / 25	31090 / 31091
Infectious Bronchitis Virus - Variant D1466	100 / 25	31092 / 31093
Infectious Bronchitis Virus - Variant QX	100 / 25	31094 / 31095
Infectious Bronchitis Virus - Variant O2	100 / 25	31187 / 31188
Infectious Bronchitis Virus - Variant Q1	100 / 25	31179 / 31180
Infectious Bronchitis Virus - Variant IB80	100 / 25	31736 / 31737
Quantitative Standard for Infectious Bronchitis	10	31422
RNA / DNA Purification	5 x 50 / 50	31314 / 31315
RNA/DNA Purification Kit HTP	4 x 96	31826

Kylt® RT-qPCR products comprise all reagents for an accurate pathogen detection, such as enzyme-mix, controls, primers and probes.

Kylt® Real-Time (RT-) PCR products comprise control reagents to prove the validity of the assay. Pathogen specific Positive Controls help monitor the efficiency of the assay. With the Negative Control any contamination of the kit components or used consumables can be ruled out. Further, Internal Controls to verify sufficient sampling, correct sample preparation and the overall Real-Time PCR run itself are included.

Kylt® Real-Time PCR setups can be used on all commercially available Real-Time PCR thermal cyclers detecting the fluorescent dyes FAM, HEX, Cy5 and TXR. Due to identical temperature profiles, all Kylt® RT-qPCRs can be combined in one run as well as with other Kylt® qPCRs. For detailed information such as required channels and applied temperature profiles for the individual products, please visit us at www.kylt.eu.



stands for...

HIGH QUALITY

Development and manufacturing in Germany are ISO 9001 certified

RELIABILITY

Highly satisfactory and reliable high-throughput routine diagnostic

ACCURACY

Sensitive, precise and fully validated detection of pathogens