

## Real Time RT-PCR assay for detection and quantification of avian Hepatitis E virus

### Description:

The aim of the project was to develop a method to detect and quantify avian Hepatitis E virus based on the presence of its nucleic acid. The assay is of importance and relevance for veterinary diagnostics.

The avian Hepatitis E virus infects predominantly poultry and is present worldwide. Clinically, the infection leads to an increase in mortality and reduced egg production. Serological methods alone are inadequate but isolation of the virus is not possible.

The RT-PCR method enables detection and quantification of all reported genotypes of the avian Hepatitis E virus. In parallel an internal control has been developed to control RNA isolation and quantification. The standard test can be done routinely for multiple samples which makes it attractive for routine screening of flocks.

Potentially interested parties: Commercial suppliers can be veterinary divisions of various pharmaceutical companies as well as companies using diagnostic methods.

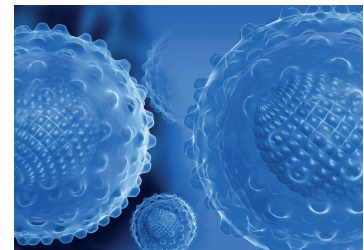
### Advantages:

- First standardized method for detection of avian hepatitis E virus
- Quantitative diagnostics of avian Hepatitis E virus is substantially improved
- Of importance and relevance for veterinary diagnostics
- The assay allows simultaneous tests of multiple probes

### Background Literature:

Bilic, I. et al. 2009. Sequence analysis and comparison of avian Hepatitis E viruses from Australia and Europe indicate the existence of different genotypes. J. Gen. Virol. 9: 863-873

Marek, A. et al. 2010. Phylogenetic analysis of avian hepatitis E virus samples from European and Australian chicken flocks supports the existence of a different genus within the Hepeviridae comprising at least three different genotypes. Vet. Microbiol. 145:54-61.



### IP Status:

in progress

### Patents:

submitted

### Availability:

under CDA

### Keywords:

- Avian hepatitis E virus
- Quantitative RT-PCR
- Poultry

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