

# Press information

## SARS-CoV-2: Friedrich-Loeffler-Institut tests susceptibility of cattle

### Monitoring of further developments recommended

Insel Riems, 26 August 2020. The origin and transmission routes of SARS-CoV-2 have not yet been fully elucidated scientifically. To better understand the potential role of farm animals in the corona pandemic, the Friedrich-Loeffler-Institut (FLI) on the island of Riems conducts infection studies. This worldwide first experimental study on cattle shows a low susceptibility to SARS-CoV-2 and the results have been published on the preprint server bioRxiv.

The zoonotic pathogen SARS-CoV-2 has the ability to infect not only humans but also animals. This in turn makes them a potential source of risk for humans. Within the scope of its official tasks in the fields of animal health and zoonoses, the FLI on the island of Riems has now tested cattle for their susceptibility to SARS-CoV-2 in an experimental study following experiments on the susceptibility of pigs, chickens and guinea pigs. The animals were experimentally infected with SARS-CoV-2 via the nasal mucosa. While no virus replication could be detected in pigs, chickens and guinea pigs, two out of six cattle showed low virus replication and subsequent antibody formation. The other four infected animals showed no signs of infection. No infection occurred in three additional contact animals.

These results suggest that cattle have a low susceptibility to SARS-CoV-2 and do not transmit the virus. Therefore, they do not appear to play a relevant role in the spread of SARS-CoV-2, nor do the test results suggest that they could be relevant as a source of infection for humans. However, it cannot be ruled out that the pathogen may be able to adapt by mutation. “Therefore, there is no immediate cause for concern, but we have to keep an eye on further developments”, says Prof. Martin Beer, head of the Institute of Diagnostic Virology at FLI. So far, there is no confirmed case of SARS-CoV-2 infection in cattle worldwide.

For further information on SARS-CoV-2 please go to:

<https://www.fli.de/en/news/animal-disease-situation/coronavirus/>

### Study

„Experimental infection of cattle with SARS-CoV-2“

bioRxiv: <https://www.biorxiv.org/content/10.1101/2020.08.25.254474v1>

### Contact

**Prof. Dr. Martin Beer**

Head of the Institute of Diagnostic Virology at FLI

Phone: 038351 7-1894

Mail: [presse@fli.de](mailto:presse@fli.de)