FMD NSP Ab ELISA 2.0

Foot and mouth disease virus antibody

Foot-and-mouth disease (FMD) is a highly contagious viral infection primarily of cloven-hoofed domestic animals, such as cattle, pigs, sheep, goats, deer, and water buffalo. In many countries the disease is controlled by vaccinations that consist of (partly) purified structural proteins (SP) of the FMD virus, and therefore vaccinated animals only elicit antibodies directed against the structural proteins. Non structural protein (NSP) is expressed only by replicating viruses, and inactivated vaccines are purified to remove the cellular proteins and NSP. Therefore, only animals that have been infected with wild type develop antibodies against NSP. It is important to differentiate SP and NSP antibodies in countries that use vaccination to control FMDV outbreaks to discriminate wild type infections and immune response to vaccination.

Validated from

*FGI «ARRIAH», Federal Center For Animal Health, Russia

Indications

- Discriminate sera between infection and vaccination
- Diagnosis of FMD in non-vaccinated herds
- Screening for test and slaughter government policy

Special Features

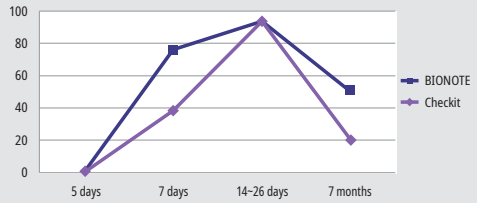
- Differential test of FMD infected or vaccinated
- High accuracy equivalent to a world standard ELISA kit
- Easy test procedure: No serum pre-dilution required
- Cost effective: No requirement for an uncoated microplate for serum pre-dilution
- Species: Cattle, Sheep, Goat, Pig
- Specimen: Plasma, Serum
- Reading time: 1 hour and 45 minutes
- Sensitivity: Cattle 93.8%
- Specificity: Cattle 99.9%, Pig 99.9%, Sheep & goat 100%

Quick Procedure

1. Prepare FMD NSP antigen coated test plate
2. Add 50 µl of controls and sample to wells
3. Add 50 µl of diluted enzyme conjugate to wells
4. Incubate plate for 90 minutes at 37°C
5. Wash plate 6 times
6. Dispense100 µl of substrate (Ready to use) into each well and incubate for 15 minutes at room temperature
7. Add 100 µl of stopping solution
8. Measure the optical density (OD) at 450 nm with reference wavelength at 620nm
9. PI value=[1-(OD $_{sample}$/mean OD $_{NC}$)] x 100

Reactivity of BIONOTE FMD NSP Ab ELISA 2.0 for sera originated from vaccinated animals

BIONOTE FMD NSP Ab ELISA 2.0 detects antibodies against nonstructural protein from 7 days to 7 months after infection
(*Experimentally contact challenge animal group, The performance evaluation was performed in OIE FMD Ref. Laboratory)



BIONOTE	0%	76.1%	93.8%	50%
Checkit	0%	38.3%	93.8%	20%

Ordering Information

Cat. No.	Description	Type	Packing size
EB4804PO	FMD NSP Ab ELISA 2.0	Microplate	480 Wells/Kit