applied biosystems







PrioCHECK FMDV type-specific products

Reliable products for the type-specific detection of the foot-and-mouth disease (FMD) virus types O, A and Asia 1 in cattle, pigs, sheep, goats, buffalo and other cloven-hoofed animals

Benefits

Fast and reliable screening for FMDV serotypes

- Evaluated by the FMD World Reference Laboratory in Pirbright, England
- Results demonstrate excellent reliability
- Detect antibodies against serotypes O, Asia 1 and A
- Can be used with sera from multiple animal species
- Applied Biosystems[™] PrioCHECK[™] FMDV Type O is an established test that has been successfully used to control outbreaks worldwide
- Applied Biosystems[™] PrioCHECK[™] FMDV Type A and Asia 1 show excellent diagnostic specificity on cattle, sheep, goat, pig and buffalo sera
- The tests also performed well in ongoing sensitivity studies in cattle and sheep

Screening and confirmation from one supplier

- Suitable for large-scale screening of unvaccinated herds after an outbreak of FMD
- Can be used as primary screening tests; positive results can be confirmed with the Applied Biosystems[™] PrioCHECK[™]
- Can also use the PrioCHECK FMDV Type O kit to check the efficiency of vaccination

Performance

The performance of the tests was extensively evaluated on cattle, sheep, goat and pig sera. Sera were either field samples or derived from infection experiments. More than 200 positive goat samples, 400 sheep and over 600 swine and cattle samples were tested.

FMDV A, Asia 1 and O subtypes are detected in all animal species tested: cattle, sheep, pigs and goats. The PrioCHECK FMDV Type A shows limited cross-reactivity with Asia strains. The PrioCHECK FMDV Type Asia 1 also detects several FMDV Type A strains, whereas the PrioCHECK FMDV Type O is highly type-specific and detects only Type O FMDV strains. The diagnostic specificity of all three PrioCHECK tests is up to 99% or more for all species, and the tests show good sensitivity in the species tested (evaluation is ongoing). The tests are therefore excellent screening tools for the detection of a FMD outbreak in a herd.

Type Asia 1 1	Diagnostic specificity (%)1	Diagnostic sensitivity (%)2		
Cattle	>99	>90–98		
Pigs	>99	ND		
Sheep	>99	100		
Goats	>99	ND		
Type A ¹	Diagnostic specificity (%) 1	Diagnostic sensitivity (%) 2		
Cattle	>99	>80–90		
Pigs	>99	ND		
Sheep	>99	ND		
Goats	>99	ND		
Type O	Diagnostic specificity (%) 1	Diagnostic sensitivity (%) 3		
Cattle	>99	>99		
Pigs	>99	ND		
Sheep	>99	>99		
Goats	ND	>99		

¹NRL Netherlands

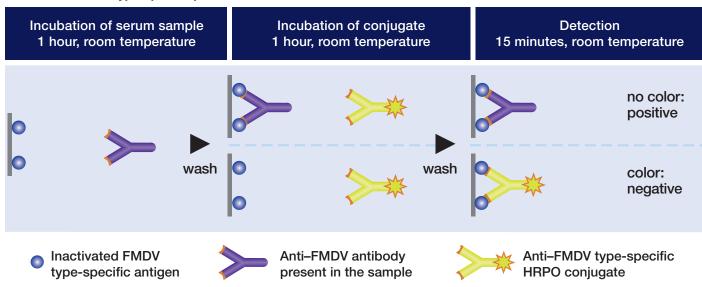


^{1,2} Pirbright

³Chenard et al. (2003)

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Foot-and-mouth disease

FMD is an important economic threat to livestock industries. The highly contagious disease, which can affect all cloven-hoofed animals is widespread throughout the world. In many countries, the disease is controlled by preventive vaccination. Vaccination is mostly banned in countries that are free of the disease.

The FMD viruses are classified into 7 main serotypes. FMDV Type O is the most commonly found serotype, followed

by FMDV Type A. Types Asia 1, A, C, and SAT 1, 2, and 3 generally occur more regionally than FMDV Type O. The existence of many serotypes makes the diagnosis complex.

We offer three different type-specific ELISA tests for the diagnosis of FMDV Types O, Asia 1 and Asia A, respectively. The tests are excellent and unique tools for the recognition of these serotypes in outbreak situations and can be applied to screen sera of all cloven-hoofed animals.

Ordering information

Product	Туре	Quantity	Cat. No.
PrioCHECK FMDV Type O Antibody ELISA Kit	ELISA	5-plate kit (440 tests)	7610420
PrioCHECK FMDV Type A Antibody ELISA Kit	ELISA	5-plate kit (450 tests)	7610850
PrioCHECK FMDV Type Asia 1 Antibody ELISA Kit	ELISA	5-plate kit (450 tests)	7610870
Related products			
PrioCHECK FMDV NS Antibody ELISA Kit	ELISA	5-plate kit (450 tests)	7610440
PrioCHECK FMDV NS Antibody ELISA Kit	ELISA	10-plate kit (900 tests)	7610760
PrioCHECK FMDV NS Antibody ELISA Kit	ELISA	5-strip plate (450 tests)	7610770

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