

Foot-and-mouth disease virus (FMDV) causes an acute vesicular diseases of cloven-hoofed animals and continues to be threat to livestock worldwide with outbreaks causing severe economic losses.

The RIDX® FMDV 3Diff/PAN Ag Combo Test Kit is a lateral flow chromatographic immunoassay that can detect all seven serotypes of FMDV antigens (type O, type A, type C, type Asia1, type SAT1, type SAT2, and type SAT3) and differentiate three serotypes of FMDV antigens (type O, type C, and type Asia1).

Principal: Chromatographic immunoassay for the qualitative test

Specimen: Bovine or porcine saliva, tissue or vesicular fluid around lip, tongue, gums, nose, hoof

Components

- FMDV 3Diff/PAN Ag combo test device (10 tests)
- Disposable swab (10 ea)
- Sample dilution buffer (1 vial)
- Disposable dropper (10 ea)
- Sample tube (10 ea)
- Paper rack for standing sample tubes (1 ea)
- Instructions for use (1 sheet)



Features

Clinical Sensitivity in spiking samples with virus (titer: 1.0×10^5 TCID₅₀/ml or higher)

- 1) 3Diff strip: Type O 88.2% (60/68), type A 100% (70/70), type Asia1 100% (60/60)
- 2) PAN strip: Type O 100% (68/68), type A 100% (70/70), type Asia1 100% (60/60), type SAT1 100% (20/20), type SAT2 100% (20/20), type SAT3 100% (20/20), and type C 100% (20/20)

Clinical Specificity

- 1) Type O, type A and PAN strip: Bovine 100% (92/92), Swine 100% (400/400)
- 2) Type Asia1: Bovine 100% (92/92), Swine 99.5% (398/400)

Differential diagnosis of 3 different serotypes (O, A, and Asia1).

Concurrent diagnosis both of viral common antigens

(all 7 serotypes) and serotype-specific antigens (O, A, and Asia1).

Sample Preparation

Vesicular fluid

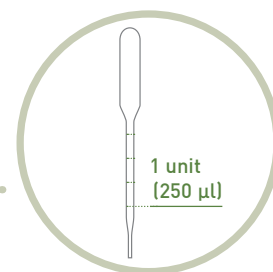
1. Collect the vesicular fluid from a blister with a syringe. If the blister bursts, collect the vascular fluid with a disposable swab.

2-1. Sample from intact blister

- ① Transfer 1 unit (approximately 250 μ l) of the sample dilution buffer to the sample tube using dropper.
- ② Add 250 μ l of vesicular fluid to the sample tube and mix gently.

2-2. Sample from burst blister

- ① Transfer 2 units (approximately 500 μ l) of the sample dilution buffer to the sample tube using dropper.
- ② Put sample-soaked swab into the sample dilution buffer and swirling gently.
- ③ Press the cotton swab against the wall of the tube to extract the sample.
- ④ Remove the swab from the test tube after extraction.



Saliva

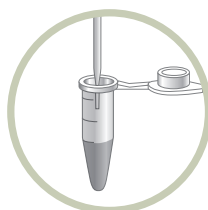
1. Sample collection
Bovine: Collect saliva from bovine's tongue directly.
Swine: Use a chewing rope or other oral fluid collect kits.
2. USE the impurities free saliva sample. Centrifuge (6,000rpm, 10min) the sample tube, if the samples have impurities (The separate container is not provided in this kit).
3. Transfer 2 units (approx. 500 µl) of sample dilution buffer to the sample tube using a dropper.
4. Soak a swab with supernatant of the centrifuged saliva.
5. Put sample-soaked swab into the sample dilution buffer and swirl gently.
6. Press the cotton swab against the wall of the tube to extract the sample.
7. Remove the swab from the test tube after extraction.

Cultured virus

1. Transfer 200 µl of the sample dilution buffer to the sample tube, Eppendorf tube or microplates.
2. Collect and add 200 µl of virus-cultured media by using the micropipette to the sample tube and swirl the tube several times to mix.

Test Procedure

- 1 Take the supernatant of the prepared sample solution by using a dropper.

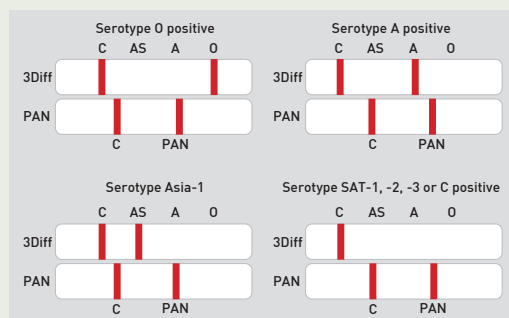


- 2 Slowly apply 4 drops (100 µl) of the sample solution into each sample hole on the test device.

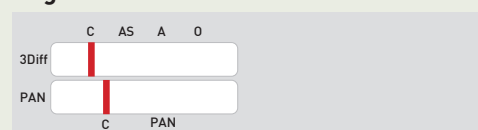


- 3 Read the result **within 15 minutes, keep on time.**

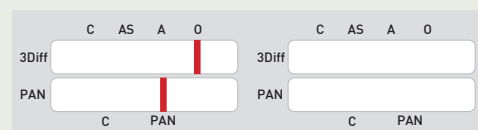
Positive



Negative



Invalid



CAT No.	Description	LIC No.	Type	Package size
LGM-VFG-71	RIDX FMDV 3Diff/PAN Ag Combo 3Diff: Serotype O, A, Asia1 PAN: O, A, C, Asia1, SAT-1, -2, -3	300-022	LFA*	10 Tests/Kit

* LFA: Lateral flow assay