

ASFV Ab Rapid Test Kit

Product #: C30011, 50T

1. Precaution

- a) This kit is designed for ASFV antibody detection in serum & plasma; make sure you are fully aware of the intended use.
- b) Check the kit package carefully and read this instruction through to confirm the validity of the kit, and the appearance of the package. Only valid kit can be used.
- c) If any damage or leakage were found, please contact your vendor for replacement. Do not use in test unless otherwise agreed by the vendor.
- d) All samples collected may be contagious, please handle carefully according to local laws and regulations. Used test kit and tested sample shall be handle carefully to avoid further contamination.
- e) The test cassette, the buffer and swab shall be used within 5min after opening the foil package. Do not open it without planned experiment.
- f) Do not use component from other sources, otherwise the result is not valid.
- g) The kit is designed for one single use, do not use repeatedly.

2. Principle

The kit is based on sandwich immunochromatographic assay, to detect African swine fever specific antibody in serum & plasma, which is rapid, accurate and easy-to-operate. Serum and plasma samples are recommend for more accurate testing with clear background. Blood samples shall be prepared before testing.

3. Application

This kit is designed to detect African swine fever antibody in serum & plasma. Other applications may be provided upon request.

4. Kit Components

This kit is available in 10T / 20T / 50T format. Please always check the kit label for information.

- a) Test Cassette, 10/20/50 pcs
- b) Sample buffer, 10/20/50 pcs
- c) Disposable pipette, 10/20/50 pcs
- d) Kit instruction, 1 pc

5. Sample Preparation

Use new pipet or micropipette tips for different samples. All samples are contagious, please handle carefully or according to local regulations.

Blood samples shall be collected into tubes without anti-coagulant, and shall be separated for serum either by centrifuge or by natural separation. For example, collect 2ml blood into a new tube, centrifuge for 5min at 4000rpm, or wait for 2hours at room temperature till the serum separates. Use the clear and transparent supernate for testing.

6. Test Steps

- a) The test will take **10min**. Schedule your time before test.
- b) Take out the sample, and bring it to room temperature if it is refrigerated. For example, take the sample and keep at room temperature for 30min.
- c) Take the needed test cassette, plastic pipette (100ul micropipette can also be used).
- d) Open the foil pack, and take sample with plastic pipette provided in the kit. Add **10ul of serum or plasma (or one drop with the pipette provided in the kit)** into the sample buffer tube provided in the kit,

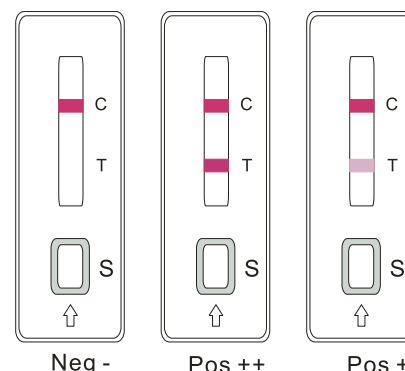
mix thoroughly by shaking for 1min manually.

- e) Add **100ul mix sample solution (or 4 drops with the pipette)** drop by drop into the sample well on the test card, and observe the result from 10min after adding the buffer into sample well on the cassette.

Note: Strong positive result will be observed in 10min, while weak positive, negative result will be slower and will be observed in less than 15min. Result over 20min will be invalid.

7. Result interpretation

There are 2 lines on the cassette, Control Line (Line C) and Test Line (Line T). Line C is used for quality control. If Line C is invisible after testing, the result will be invalid, please run the test again with new cassette.



NEGATIVE

Only Line C is visible, Line T is not visible

POSITIVE

Line C and Line T are both visible.

Stronger (Darker) Line T indicates **Strong Positive (++)**

Weak (Lighter) Line T indicates **Weak Positive (+)**

Result over 20min is invalid.

8. Sensitivity and specificity

Validation with more than 178 field serum samples indicated that compared with commercial blocking ELISA, the sensitivity of this rapid test kit is 96.15% and the specificity is 100%. The total accuracy is 98.3%.

The kit does NOT detect antibodies of PRRSV, PRV, SIV, PEDV, FMDV, PCV, CSFV, etc.

9. Limitation of the methodology

- The p30 protein of ASFV is the most abundantly expressed viral protein, which is expressed early during ASFV infection, making it a key target for early detection and diagnosis. The protein is highly antigenic, meaning it triggers a strong antibody response, and antibodies against p30 can be detected relatively early in the infection. The current test kit targets at the P30 specific antibodies in swine serum, which can be regarded as early infection testing.
- Due to the limitation of methodologies, lateral flow immunoassay is approx. 10 times less sensitive than ELISA, thus the kit is for screening purpose and on-site test. Positive result shall be further confirmed by PCR and/or other official methodologies. Diagnosis of ASF shall be determined by the vet, considering both clinical symptom and laboratory test.
- The Color of Line T is related to ASFV antibody contained in the sample. If the antibody concentration is at very high level, Line T may appear and then be lighter, in this case, please further dilute the sample solution with DD water and run the test again to see a stable Line T.
- Elimination of ASF relies on complicated biosecurity measures and antibody & antigen testings. Please consider choose high sensitivity techniques if you want to eradicate ASF from your herd.

10. Storage and period of validity

The kit will be valid for 12 months when stored at 2-30°C in dry and dark place. Do not freeze. Avoid direct sunlight. Production date and expiry information are printed on the package.