

One Step Feline Leukemia virus RAPID TEST

Anigen Rapid FeLV Ag Test Kit

1. Explanation of the Test

Feline Leukemia Virus (FeLV) is a retrovirus that can directly cause cancer. The virus is usually transmitted through contact with the saliva of an infected cat. Kittens under 16 weeks are the most susceptible to the virus. Cats over 16 weeks who are dealing with an illness unrelated to FeLV, stress, or injury may also be more susceptible. Diseases caused by FeLV include lympho-sarcoma, myelogenous leukemia, thymic atrophy, nonregenerative anemia and panlukopenia-like disease. Because FeLV is immunosuppressive, it predisposes infected cats to variety of econdary diseases. The FeLV is excreted in saliva and tears and possibly the urine and feces of infected cats. Prolonged, extensive cat-to-cat contact is required for efficient spread, because the virus is rapidly inactivated by warmth and drying.

The Anigen Rapid FeLV Ag Test Kit is a chromatographic immunoassay for the qualitative detection of FeLV antigen in feline whole blood, plasma or serum.

The Anigen Rapid FeLV Ag Test Kit has the letters of T and C as “Test Line” and “Control Line” on the surface of the kit. Both the “Test Line” and “Control Line” in the result window are not visible before applying any samples. The “Control Lines” is used for procedural control and should always appear if this procedure is performed properly and the test reagents of the control line are working. A purple “Test Line” will be visible in the result window if there is enough FeLV antigens in the specimen.

The specially selected FeLV antibodies are used in the test and as both capture and detector materials. These enable the Anigen Rapid FeLV Ag Test Kit to identify to FeLV antigen in specimens, with a high degree of accuracy.

2. Materials Provided

Anigen Rapid FIV Ab Test Kit contains following items to perform the assay

- 1) Ten(10) Anigen Rapid FeLV Ag Tests
 - 2) One (1) Assay Diluent bottle
 - 3) Ten (10) Disposable Capillary tube for specimens
 - 4) Ten (10) Anticoagulant bottles
 - 5) One (1) Instructions for use
- ♣ A dark color score line on the capillary tube is the indicator line for 10 μ l.



3. Storage and Stability

- 1) The Anigen Rapid FeLV Ag Test Kit should be stored at room temperature. The test device is sensitive to humidity and as well as to heat.
- 2) Perform the testing immediately after removing the test device from the foil pouch.
- 3) Do not use it beyond the expiration.

4. Specimen Collections and Storage

- 1) The test should be performed using serum, plasma, or whole blood.
- 2) [Whole blood]

Collect on anticoagulated blood sample in EDTA, heparin for citrate using standard clinical laboratory procedures. Anticoagulated whole blood samples should be tested within 24 hours of drawing. If delays are expected between samples should be stored either on ice or refrigerated(2~7°C), but should not be frozen. If anticoagulated whole blood samples cannot be tested within this period of time, separate plasma by centrifugation and store as described in the next section.

3)[Plasma]

Collect an anticoagulated blood sample using standard clinical laboratory procedures. Separate plasma by centrifugation. Plasma samples may be stored refrigerated(2~7°C) for up to 72hours; for longer storage, freeze at or below -20°C in vials with air-tight seals.

4) [Serum]

Collect and prepare serum samples using standard clinical laboratory procedures. Serum samples may be stored refrigerated (2~7°C) for up to 72 hours; for longer storage, freeze at or below -20°C in vials with air-tight seals.

If specimens are not immediately tested, they should be refrigerated at 2~8°C for up to 72 hours. If testing is to be performed after 72 hours from collection, the specimens should be stored frozen at -20°C or below. They should be brought to room temperature prior to use.

Specimens containing precipitate may yield inconsistent test results. Such specimens must be clarified prior to assaying.

5. Precautions

- 1) For veterinary diagnostic use only.
- 2) For best results, strict adherence to the instructions is required.
- 3) All specimens should be handled as being potentially infectious.
- 4) Do not open or remove the test kits from their individually sealed pouches until immediately before their use.
- 5) Do not use the test kit if the pouch is damaged or the seal is broken.
- 6) Do not reuse test kits.
- 7) All reagents must be at room temperature before running the assay.
- 8) Do not use reagents beyond the stated expiration date marked on the label.
- 9) The components in this kit have been quality control tested as a standard batch unit. Do not mix components from different lot numbers

6. Test Procedure

- 1) Remove the test device from the foil pouch, and place it on a flat and dry surface.
- 2) Using the disposable capillary tube, add one (1) drop (approximately 10ul) of feline serum, plasma or whole blood into the sample hole, and then add two (2) drops (approximately 60ul) of the assay diluents.
- 3) As the test begins to work, you will see a purple color move across the result window in the center of the test device. If the migration has not appeared after 1 minute, add one more drop of the assay diluents to the sample well.
- 4) Interpret test results at 10 minutes. Do not interpret after 10 minutes.

Caution: The above interpreting time is based on reading the test results at room temperature of 15 ~ 30°C. If your room temperature is significantly no more than 15°C, then the interpreting time should be properly increased.

7. Interpretation of the Test

- 1) A color band will appear in the left section of the result window to show that the test is working properly. This band is the Control line (“C”).
- 2) The right section of the result window indicates the test results. If another color band appears in the right section of the result window, this band is the Test line (“T”).

Negative : The presence of only one purple color band within the result window indicates a negative result.



Positive : The presence of two color bands (“T” band and “C” band) within the result window, no matter which band appears first, indicates a positive result.



Invalid : If the purple color band is not visible within the result window after performing the test, the result is considered invalid. The directions may not have been followed correctly or the test may have deteriorated. It is recommended that the specimen be re-tested.



8. Limitations of the Test

- 1) Anigen Rapid FeLV Ag Test Kit will only indicate the presence of FeLV in the specimen and should not be used as the sole criteria for the diagnosis of FeLV infection.
- 2) As with all diagnostic tests, all results must be interpreted together with other clinical information available to the veterinarian.
- 3) If the test result is negative and clinical symptom is persist, additional testing using other clinical methods is recommended. A negative result does not at any time preclude the possibility of FeLV infection.

9. Expected Values

The Anigen Rapid FeLV Ag Test Kit has been compared with a leading commercial FeLV antigen test. The overall accuracy is greater or equal to 99.0%

10. Bibliography of Suggested Reading

- 1) K. Hartemann, R.M.Werner, H.Egberink, O. Jarrett. Comparison of six in-house tests for the rapid diagnosis of feline immunodeficiency and feline leukaemia virus infections. *Veterinary Record*. 15:317-320. 2001.
- 2) Larry J. Swango. Evaluation of feline leukemia virus diagnostic tests available for in-office use by veterinarian. *J Am Vet Med Assoc*. 199(10):1386-1389. 1991.
- 3) Sheryl D. Babyak, M.G.Groves, Donna S. Dimski, Joseph Taboada. Evaluation of a saliva test kit for feline leukemia virus antigen. *J Am Anim Hosp Assoc* 32:397-400. 1996.
- 4) William D. Hardy, Jr., and Evelyn E. Zuckerman. Development of the immunofluorescent antibody test for detection of feline leukemia virus infection in cats. *J Am Vet Med Assoc*. 199(10):1327-1335, 1991.
- 5) William D. Hardy, Jr., and Evelyn E. Zuckerman. Ten-year study comparing enzyme-linked immunosorbent assay with the immunofluorescent antibody test for detection of feline leukemia virus infection in cats. *J Am Vet Med Assoc*. 199(10):1365-1373. 1991.