

Performing the *Speed*[™] Duo Test



Equipment needed for one test:

- One test device
- One single-use pipette
- One bottle of REAGENT

1. SAMPLING

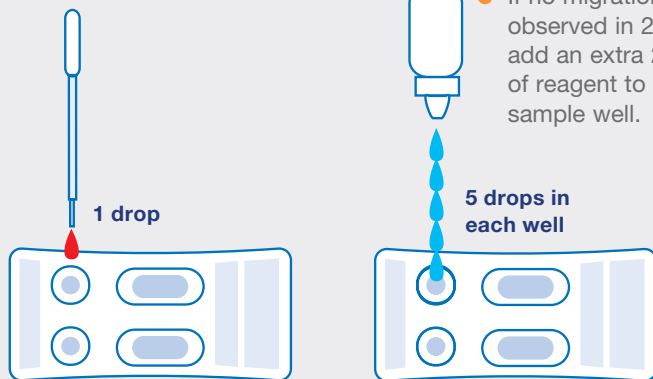
Type of sample: Serum, plasma or whole blood with anticoagulant.

Storage of samples: Serum, plasma: At room temperature: 24 h
Between 2°C and 8°C: 48 h to 7 days
At -20°C: several months.

Whole blood with anticoagulant: At room temperature: 24 h
Between 2°C and 8°C: maximum 72 h.

2. PREPARATION

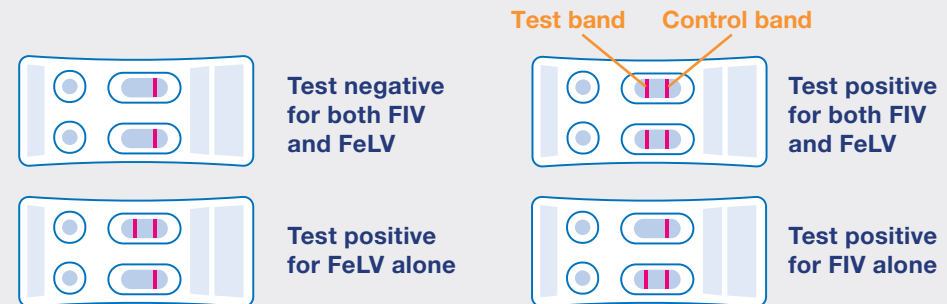
- Using the pipette vertically, place one drop of the sample into each sample well.
- Immediately place 5 drops of reagent into each sample well.
- If no migration is observed in 2 minutes, add an extra 2 drops of reagent to the sample well.



Place the test device on a firm, flat surface to allow optimal migration.

3. READING

Time to reading: 15 minutes of migration*. The result appears in the result window.



Both the control and test bands must be pink. If no control band appears in the result window within the allotted time for migration, the test is invalid. Please refer to the FAQs overleaf for more information on reading tests.

*The appearance of a test band after only 10 minutes of migration is indicative of a positive test

4. INTERPRETATION

- **FeLV:** A positive result associated with indicative clinical signs of leucosis makes infection with FeLV highly likely. Vaccination does not interfere with the results of the FeLV test.
- **FIV:** A positive result associated with indicative clinical signs makes infection with FIV highly probable. In kittens under 6 months of age and born to an infected queen, the persistence of colostral antibodies may give a positive result even if the kitten is free from infection.
- **FeLV & FIV:** In areas of low prevalence and in the absence of indicative clinical signs, positive results should be confirmed with a second test. However, the predictive value of a negative result in such cases is excellent.

Please refer to the Cats Protection's guidelines

https://www.cats.org.uk/media/8784/vet_6205-fiv_felv-testing-flowchart.pdf

STORAGE

Where should the tests be stored?

Tests should be stored at a temperature between 2 and 30°C.

Do not allow the tests to freeze - be careful if stored in the fridge as the lower areas of a fridge can easily be below freezing.

Do not store above 30°C.

Do tests need to be at room temperature when used?

Yes, if the tests have been stored in the fridge, please wait until the test has reached room temperature before running it.

Can I use the test after the expiry date?

No, the test's accuracy may be unreliable beyond the expiry date.

SAMPLING

I do not have a fresh sample, will the test still be accurate?

If serum, or plasma is used, the samples will remain usable for:

- Up to 24h at room temperature
- 48 h to 7 days between 2°C and 8°C
- Several months at at -20°C

If whole blood with anticoagulant is used, the samples will remain usable for:

- Up to 24 hours at room temperature: 24 h
- Up to 72 hours between 2°C and 8°C

Can I use whole blood?

Not recommended, as whole blood could lead a very faint non-coloured line that might be wrongly interpreted as a positive result. Serum, plasma or whole blood with anticoagulant should be used instead.

PREPARATION

Can I use blood directly from the syringe?

No, as the volume of sample dispensed from a syringe will not be calibrated which leads to inaccurate results. Please use the pipettes provided instead.

Furthermore whole blood is not recommended to be used to run the test

Can I use different pipettes?

No, as the volume of sample used is very important, please use the pipette provided with the kit.

I have some reagent left from another box, can I keep it?

No, as each batch of reagent is calibrated with the matching test with the same batch number. Please ensure that each test is run with the paired reagent, and dispose of any remaining reagent once the last test in the box has been used.

READING

Is the 15 minutes recommended reading time important?

Yes, It is very important that the test is read at 15 minutes. A delayed reading could lead to inaccurate results. Setting a timer and taking a photo of the test when ready can be very useful at busy times.

The control band is faint, what does this mean?

The control line must be visible as a definite PINK line at 15 minutes otherwise the test is invalid. Running another test is advisable when this occurs.

The test band is faint, what does this mean?

If the band is pink, even a faint line is considered a true positive.

A grey 'ghost' band should NOT be considered a positive result, and could be linked to incorrect preparation - please check the sample used and method.

INTERPRETATION

I have the results, what happens next for the patient?

Please refer to the Cats Protection guidelines and flowcharts.

Can false positives and negatives happen?

Any diagnostic test can lead to false results despite being performed correctly. Thankfully, this remains rare. The sensitivity and specificity of Speed Duo are as follows:

FeLV (vs. viral isolation):

Sensitivity: **94.7%** Specificity: **99.2%**

FIV (vs. Western Blot):

Sensitivity: **96.3%** Specificity: **98.9%**

These results are really high and make the use of Speed Duo a very powerful screening tool. Furthermore, quality control at the time of production and continuously after distribution ensures that the quality of the tests provided remains consistent.

The positive result does not match the clinical presentation, what are the possible outcomes?

The clinical presentation must always be considered when interpreting the results of a test.

An unexpected positive result may be found in asymptomatic cats, during transient viraemia for example. Please refer to the Cats Protection guidelines and flowcharts for more information.

A suspicious result was retested and came back with a different result, what does that mean?

It is important to remember that two different tests or even the same test performed at different times could give different results and yet both be correct.

For instance, a cat recently infected with FeLV may test positive but manage to eliminate the virus within a few weeks (transient viraemia), and therefore test negative then. The results are discordant yet true results.

When testing for FIV, a cat tested shortly after infection or in the terminal stages of the disease may have levels of antibodies too low to be detected.

If you have further questions or wish to discuss a case, please call 01825 741 991 or email veterinary@cats.org.uk

TOP TIP: If you wish to discuss some results, taking a photo of the test will be very useful so the Advisor can provide the best possible advice.