

FIV infection in domestic pet cats in Australia and New Zealand: Guidelines for diagnosis¹

Key Words : FIV, Point-of-care, Anigen Rapid, Whole blood, Saliva

Introduction

Determining an individual cat's FIV status is useful in assisting with patient management and in managing the risk of FIV transmission. FIV testing should be prioritized in cats with sequential opportunistic infections, unexplained neutropenia, anemia, or lymphoma. Testing with a rapid and affordable FIV point of-care (PoC) kit to detect antibodies is usually the first step when diagnosing FIV infection.

PoC FIV testing using whole blood

In FIV-unvaccinated cats, 3 FIV PoC test kits have shown good sensitivity (Se) and specificity (Sp).

- ① **Anigen Rapid™ (Se 100%, Sp 100%; BIONOTE)**
- ② Witness™ (Se 100%, Sp 100%; Zoetis)
- ③ SNAP Combo™ (Se 100%, Sp 97%; IDEXX)

In FIV-vaccinated cats (or when the FIV vaccination status of cats is unknown), only 2 test kits can distinguish antibodies produced in FIV-vaccinated cats and FIV-infected cats

- ① **Anigen Rapid™ (Se 100%, Sp 100%)**
- ② Witness™ (Se 100%, Sp 95%)
- ③ SNAP Combo™ (Se 100%, Sp 0%)

Alternatives to venipuncture

Stress associated with FIV testing should be minimized. The 3 methods below can be considered as alternatives to venipuncture, **even though such testing is "off label"**.

- ① Use of foot pad bleeding
- ② Use of ear tip bleeding
- ③ Use of saliva sample

PoC FIV testing using saliva

Suggested procedure for saliva testing

- ① Saliva is collected from the caudal oral mucosa using a clean cotton tip.
- ② The saliva-laden swab is held in the sample well of test kit and gently blotted while diluent (4 drops) is dropped onto the cotton tip of the swab.
- ③ A result is read after 10 minutes.

In a pilot study using saliva, **the Anigen Rapid™ kit performed superiorly to the other kits.**

- Anigen Rapid™ (Se 100%)

Conclusion

Saliva testing in a clinic or shelter setting is often easier to perform than blood testing, and is also less stressful for the cat, its owner and staff member.

Saliva testing for FIV antibodies using Anigen Rapid™ kits may offer a welfare-friendly alternative to blood testing.



1. M E Westman, S J Coggins, et al., Feline immunodeficiency virus (FIV) infection in domestic pet cats in Australia and New Zealand: Guidelines for diagnosis, prevention and management. Aust Vet J. 2022 Aug;100(8):345-359.