

Anigen Rapid FIV Ab / FeLV Ag

Evaluation of the sensitivity and specificity of Anigen Rapid FIV Ab/FeLV Ag Test Kit and compare result with other commercial kits

INTRODUCTION

Feline immunodeficiency virus (FIV) is a retrovirus, and FIV infection is commonly referred to as cat HIV or cat AIDS because it has a similar effect on felines. Feline leukemia virus (FeLV) infection is one of the most common infectious diseases in cats; if not treated by the cat's immune system, it can lead to lethal diseases that ultimately result in death.

PURPOSE

To evaluate the diagnostic sensitivity and specificity of the Anigen Rapid FIV Ab/FeLV Ag Test Kit with the results of other commercial kits on the market.

MATERIALS AND METHODS

A total of 297 feline sera were used for the FIV test and 320 feline sera for the FeLV test. All test procedures were followed according to the manufacturer's instructions. Each kit was used with only one lot. The results of the kit were recorded as positive or negative.

RESULTS

The test results of the Anigen Rapid FIV Ab/FeLV Ag Test Kit will be recorded as positive and negative. The diagnostic sensitivity, specificity, and percent agreement will be shown in the product comparison table.

CONCLUSION

This study shows that the Anigen Rapid FIV Ab Test Kit has its advantages. The Anigen Rapid FIV Ab Test Kit demonstrated excellent diagnostic sensitivity and specificity compared to other commercial test kits. Even though it has the same diagnostic sensitivity of 96.8% and specificity of 98.9% as the Speed Duo FeLV+FIV (BVT), it has higher diagnostic sensitivity and specificity than the SNAP Combo FeLV/FIV (IDEXX) kit.

In addition, the SNAP Combo FeLV/FIV Plus did not detect two FeLV antigen-positive samples confirmed by virus isolation. The Anigen Rapid FIV Ab/FeLV Ag Test Kit did not detect one FeLV antigen-positive sample. The Speed® Duo FeLV+FIV (BVT) did not detect one FeLV antigen-positive sample and produced one invalid result. The Anigen Rapid FIV Ab/FeLV Ag Test Kit has better sensitivity than the two commercial kits for the FeLV Ag Test and the same specificity as the two commercial kits for the FeLV Ag Test.

Table 1. Comparison test result of FIV

Results	Western blot			Test Result
	Positive	Negative	Total	
Anigen Rapid	Positive	30	3	33
	Negative	1	263	264
	Total	31	266	297
SNAP Combo	Positive	29	3	32
	Negative	2	263	265
	Total	31	266	297
Speed® Duo	Positive	30	3	33
	Negative	1	263	264
	Total	31	266	297

Table 2 : Comparison test result of FeLV Ag

Results	Virus isolation			Test Result
	Positive	Negative	Total	
Anigen Rapid	Positive	18	3	21
	Negative	1	298	299
	Total	19	301	320
SNAP Combo	Positive	17	3	20
	Negative	2	298	300
	Total	19	301	320
Speed® Duo	Positive	17	3	20
	Negative	2	298	300
	Total	19	301	320