IDEXX SNAP tests consistently deliver superior performance

Introduction

When it comes to infectious disease testing, accurate, timely results are paramount. However, head-to-head comparisons reveal significant differences between the sensitivity and specificity of various in-house tests on the market. These differences can impact your clinical decisions. As this paper demonstrates, IDEXX SNAP® tests consistently outperform other in-house tests in peer-reviewed studies.

Recent peer-reviewed study results

Antigen/Antibody	IDEXX SNAP® test	Sensitivity	Lateral flow test	Sensitivity	Sample size*	Reference method(s)
Heartworm	SNAP® 4Dx® Plus Test	97.4%	VetScan® FLEX4 Rapid Test[1]	76.9%	232	ELISA†
B. burgdorferi (Lyme)	SNAP® 4Dx® Plus Test	95.5%	VetScan® FLEX4 Rapid Test[2]	40.9%	105	Western Blot
Ehrlichia canis	SNAP® 4Dx® Plus Test	97.1%	VetScan® FLEX4 Rapid Test[2]	61.4%	154	ELISA/IFA
Ehrlichia ewingii	SNAP® 4Dx® Plus Test	98.2%	VetScan® FLEX4 Rapid Test[2]	59.3%	163	ELISA
Ehrlichia chaffeensis‡	SNAP® 4Dx® Plus Test	64.3%	VetScan® FLEX4 Rapid Test[2]	35.7%	151	ELISA
Anaplasma phagocytophilum	SNAP® 4Dx® Plus Test	84.5%	VetScan® FLEX4 Rapid Test[2]	12.7%	160	IFA
Anaplasma platys	SNAP® 4Dx® Plus Test	83.3%	VetScan® FLEX4 Rapid Test[2]	33.3%	115	ELISA
Giardia	SNAP® *Giardia* Test	87.1%	VetScan® Canine Giardia Rapid Test[3,4]	70%	101	IFA
Giardia	SNAP® *Giardia* Test	87.1%	Witness® Giardia Test[4]	73.3%	87	IFA
FeLV	SNAP® FIV/FeLV Combo Test	100%	VetScan® Feline FIV/FeLV Rapid Test[5]	85.6%	146	ELISA
FeLV	SNAP® FIV/FeLV Combo Test	100%	Witness® FeLV-FIV Test[5]	89%	146	ELISA

*Comparative performance using field samples.
†PetChek ELISA with heat treatment.
‡The IDEXX SNAP 4Dx Plus Test is not labeled for detection of antibodies to *E. chaffeensis*, but a peer-reviewed study showed superior sensitivity when compared to the VetScan FLEX4 Rapid Test.

SNAP tests leverage reference laboratory quality

IDEXX scientists created the SNAP® assay by combining advanced technology used in reference laboratories with well-defined diagnostic markers. While the platform of SNAP tests continues to expand, each test delivers on the promise of reference-laboratory quality with pet-side results.

Three unique steps enhance the sensitivity and specificity of SNAP tests to help you make the right decision for your patient

Bidirectional flow enhances sensitivity

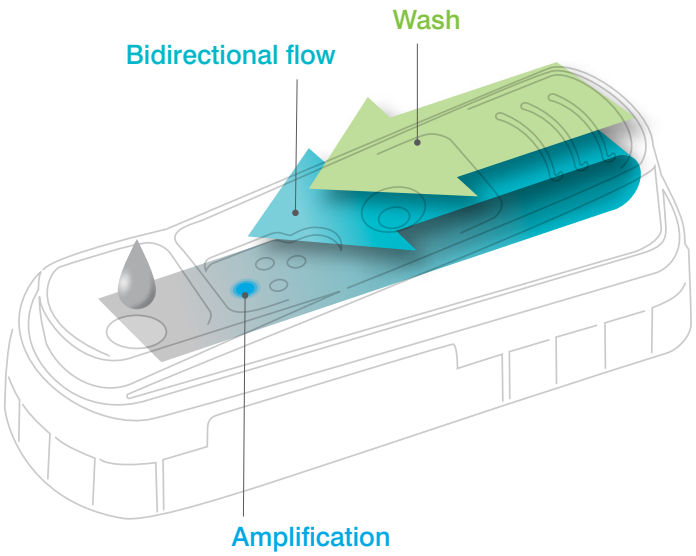
The patient's sample is mixed with a liquid specifically formulated for each test. When added to the SNAP® device, this mixture flows over the capture reagents on the test spots toward the activation circle. Activating the device draws the sample mixture back across the capture reagents a second time. This provides an additional opportunity for binding on the test spots, which increases the sensitivity of results.

Integrated wash step maximizes specificity

Activating the SNAP device also triggers a wash buffer that removes unbound sample (blood cells, fecal material) from the surface of the device. This enhances the specificity of the test and produces a clean white background that makes it easy to interpret results.

Amplification reveals low-level positives

Once the sample mixture has bound to the test spots, it undergoes an amplification process to maximize the signal, further increasing the sensitivity of the test.



Summary and conclusions

The unique SNAP® platform, with its patented bidirectional flow, integrated wash step, and amplification, delivers the superior sensitivity and specificity of reference laboratory-quality testing to the pet-side assay. For more than 25 years, veterinarians, scientists, and researchers have relied on SNAP® tests to establish the prevalence of infectious diseases worldwide. Their work has validated the accuracy and consistent performance of SNAP tests in over 100 peer-reviewed studies.[6] Today, more than 20 million SNAP tests are run each year, making it one of the most trusted and commonly used in-clinic diagnostic platforms in the world.[6]

For more information, visit **idexx.com/snap**

References

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