

Vcheck M

Feline Diarrhea 8 Panel

Sample-In, Result-Out:
One-step Identification of Diarrhea-causing Pathogens



✓ **MULTIPLEX DETECTION**

Detecting 8 common causes of diarrhea at once

✓ **ONE-STEP DETECTION**

Integration of extraction and amplification process

✓ **COMPREHENSIVE DETECTION**

Ready-to-use stool pretreatment kit included

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Importance of Diarrhea Testing




Diarrhea caused by infections is a common issue in feline practice, especially among young cats and those with outdoor access. Symptoms can vary from mild and sporadic to severe.

Diarrhea can stem from bacterial, viral, or protozoan infections, or a combination thereof, often presenting similar clinical signs. This similarity complicates definitive diagnosis and the application of effective treatments.

Therefore, precise differential diagnosis is crucial to pinpoint the causative agent and ensure tailored treatment strategies.

Major Pathogens Behind Feline Diarrhea¹

Supportive care is primarily provided to patients with diarrhea, encompassing fluid therapy and antiemetic agents. Additionally, differentiating between bacterial and protozoal infections is critical. Certain antibiotics may effectively target specific strains, while others may face resistance. Moreover, treatment durations vary depending on the pathogen. Therefore, accurately identifying the causative organism is essential

Type	Pathogen	Clinical Signs	Diarrhea Cause Likelihood	Zoonotic	Treatment
 Virus	Feline Parvovirus (Feline Panleukopenia)	<ul style="list-style-type: none"> (+/-) Diarrhea Other signs : Anorexia, fever, depression, vomiting, dehydration 	Likely cause	X	Symptomatic therapy and nursing care (Fluid therapy, antiemetics, antimicrobial) * In severe cases, plasma transfusion
	Feline Coronavirus (Coronaviral enteritis)	<ul style="list-style-type: none"> Diarrhea (Transient, mild) Other signs: Vomiting, Feline infectious peritonitis (FIP) 	Possible cause/ Carrier	X	
 Bacteria	<i>Salmonella</i> spp.	<ul style="list-style-type: none"> Diarrhea (Watery to mucoid) Other signs : Fever, anorexia, vomiting, dehydration 	Possible cause/ Carrier	O	Fluid therapy, antibacterial (Chloramphenicol, etc.)
	<i>Campylobacter</i> spp.	<ul style="list-style-type: none"> Diarrhea (Watery mucoid) Usually asymptomatic 	Unlikely cause	O	Antibacterial (Erythromycin, etc.)
 Protozoa	<i>Toxoplasma gondii</i>	<ul style="list-style-type: none"> Small-bowel diarrhea (Self-limiting) Usually asymptomatic 	Unlikely cause	O	Antibacterial (Clindamycin, etc.) * Available drugs usually suppress replication not kill it
	<i>Giardia lamblia</i>	<ul style="list-style-type: none"> Diarrhea (None to chronic) Weight loss (Vomiting unusual) 	Possible cause	O	Dietary manipulation with antiprotozoal (Metronidazole, etc.)
	<i>Cryptosporidium</i> spp.	<ul style="list-style-type: none"> Small-bowel diarrhea Other signs : Anorexia, weight loss (Vomiting uncommon) 	Likely cause	O	Antiprotozoal (Azithromycin, etc.) * Optimal duration is uncertain
	<i>Tritrichomonas blagburni</i>	<ul style="list-style-type: none"> Large-bowel diarrhea (Waxing, contain mucus and fresh blood) 	Likely cause	O	Antiprotozoal (Metronidazol, etc.)

※ Please note that treatment approaches can vary between hospitals, and this information is for reference only

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Key Strengths

Screening at once



Simultaneous detection of 8 possible pathogens in a patient with diarrhea

Earlier detection



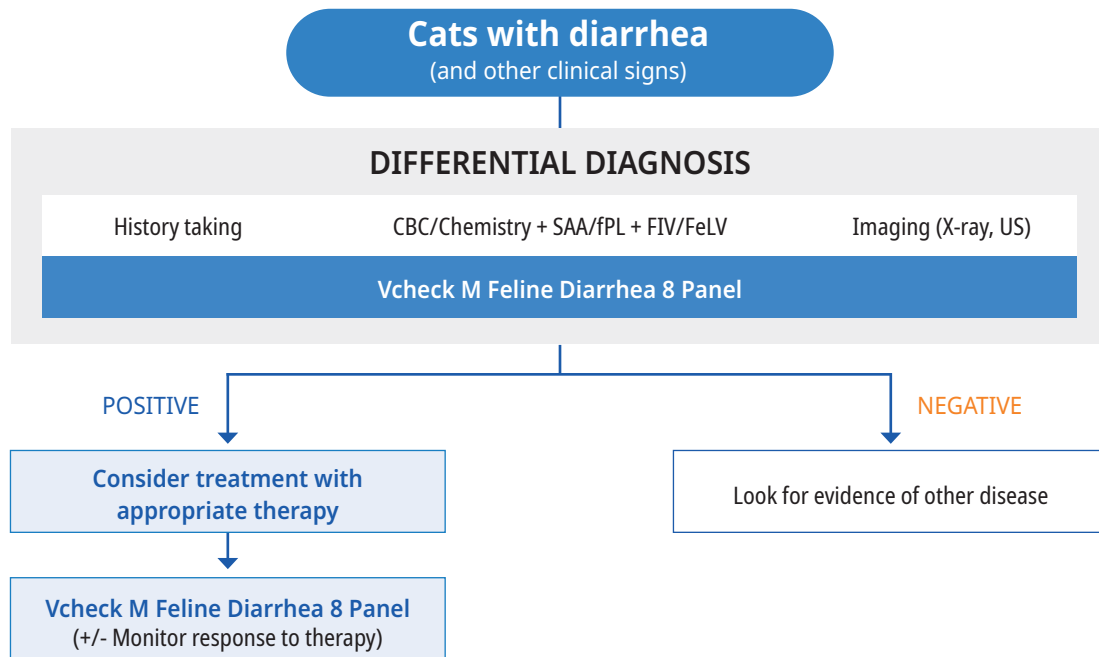
Early detection of pathogens in patients with mild clinical symptoms or early clinical stages

Zoonotic potential



Determining the potential for transmission by confirming the presence of zoonotic infections

Diagnostic Algorithm



Specifications



Detection Target

- : ① Feline parvovirus
- : ② Feline coronavirus
- : ③ *Toxoplasma gondii*
- : ④ *Giardia lamblia*
- : ⑤ *Cryptosporidium* spp.
- : ⑥ *Salmonella* spp.
- : ⑦ *Tritrichomonas blagburni*
- : ⑧ *Campylobacter* spp.

Species

: Feline

Sample Type

: Feces 0.1g

Testing Time

: 70 minutes

Storage Condition

: 2~28 °C

Shelf Life

: 12 months

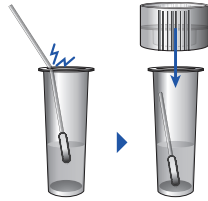
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Test Procedure

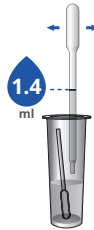
- *Please carefully refer to the provided insert before running a test
- *Please use provided stool pretreatment kit within the product only

[Stool pretreatment kit components]

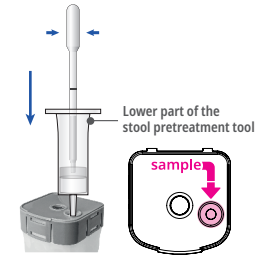
Disposable swab, disposable dropper, stool pretreatment tool, stool pretreatment solution, tube cap



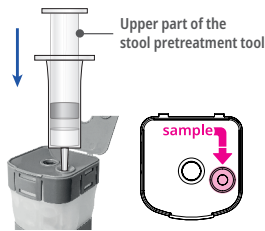
- 1 Collect 0.1g of a sample using a disposable swab and add it to the stool pretreatment solution.



- 2 Collect 1.4ml of a sample using a disposable dropper.



- 3 Place the stool pretreatment tool into the sample hole of the cartridge. And inject the sample into the tool.



- 4 Press down the upper part of the stool pretreatment tool to inject the sample into the cartridge.



- 5 Close the lid of the cartridge and insert it into the M10 module.

Result interpretation

	Pathogen	Internal Control
Positive	+ ct value	V
Negative	- N/A	V
Invalid / Re-test	+ / -	!

Performance

- Analytical sensitivity¹ (Limit of detection, LoD)

	<i>Campylobacter</i> spp.	<i>Salmonella</i> spp.	Feline coronavirus	<i>Toxoplasma gondii</i>	<i>Cryptosporidium</i> spp.	Feline parvovirus	<i>Tritrichomonas blagburni</i>	<i>Giardia lamblia</i>
LoD (copies/mL)	2.7X10 ³	2.7X10 ³	9X10 ²	2.7X10 ³	2.7X10 ³	9X10 ²	2.7X10 ³	9X10 ²

- Clinical evaluation² (compared to Conventional PCR & Real-time PCR)

	<i>Campylobacter</i> spp.	<i>Salmonella</i> spp.	Feline coronavirus	<i>Toxoplasma gondii</i>	<i>Cryptosporidium</i> spp.	Feline parvovirus	<i>Tritrichomonas blagburni</i>	<i>Giardia lamblia</i>
Sensitivity	100% (2/2)	-	100% (39/39)	-	-	100% (14/14)	100% (6/6)	100% (6/6)
Specificity	100% (79/79)	100% (81/81)	100% (47/47)	100% (81/81)	100% (81/81)	100% (72/72)	100% (75/75)	100% (77/77)

1. SD Biosensor, Inc. R&D department
2. Commercial laboratories in Korea

Ordering Information

Product No.	Product Name	Operating Condition	Packing Unit
VCM108AC	Vcheck M Feline Diarrhea 8 Panel	2 ~ 28 °C	5 Tests/Kit