

FOR VETERINARY USE ONLY

# Vcheck M Ver.5

State-of-the-art POC Molecular Diagnostic System



**BIONOTE**



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# State-of-the-art POC Molecular Diagnostic System

Vcheck M is a molecular diagnostic analyzer capable of both nucleic acid extraction and amplification automatically.

Vcheck M makes it possible for veterinarians to confirm infectious diseases at the point-of-care and enable fast and effective treatment.



# Vcheck M10 Console

SIMPLE & EASY CONTROLLER AND ACCURATE DATA MANAGER



Seamless connectivity (LIS/HIS)



Accurate data analysis algorithm



User friendly interface with animated guide



## Specification

|                        |                                                    |
|------------------------|----------------------------------------------------|
| <b>Model</b>           | : Vcheck M10 Console                               |
| <b>Test Capacity</b>   | : Up to 8 modules per console                      |
| <b>Power</b>           | : AC100~240V, 50/60 Hz                             |
| <b>Display</b>         | : 10.1" color touch screen                         |
| <b>Memory</b>          | : 5,000 results (Ct values & amplification curves) |
| <b>Barcode Scanner</b> | : Built-in                                         |
| <b>Connectivity</b>    | : HL7 PCD-01 profile support                       |
| <b>Dimension</b>       | : 17 * 23 * 39 cm                                  |
| <b>Weight</b>          | : 2 Kg                                             |

## Ordering Information

| Product No. | Product Name       | Operating Condition | Packing Unit |
|-------------|--------------------|---------------------|--------------|
| VCM752EA    | Vcheck M10 Console | 10 ~ 40 °C          | 1 EA         |

# Vcheck M10 Module

## RANDOMLY ACCESSIBLE ANALYZER



Minimum maintenance requirements



Easy connection between Modules



Automated nucleic acid extraction  
& amplification



Not  
Connected



Connecting



Connection  
Completed



Running



## Specification

|                      |                              |
|----------------------|------------------------------|
| <b>Model</b>         | : Vcheck M10 Module          |
| <b>Test Capacity</b> | : 1 test at a time           |
| <b>Power</b>         | : AC100~240V, 50/60 Hz       |
| <b>Extraction</b>    | : Silica technology          |
| <b>Test Method</b>   | : Real-time PCR, LAMP        |
| <b>Thermo Module</b> | : Peltier module             |
| <b>Optic Module</b>  | : 3 channels (FMA, HEX, Cy5) |
| <b>Dimension</b>     | : 14 * 32 * 33 cm            |
| <b>Weight</b>        | : 7 Kg                       |

## Ordering Information

| Product No. | Product Name      | Operating Condition | Packing Unit |
|-------------|-------------------|---------------------|--------------|
| VCM753EA    | Vcheck M10 Module | 10 ~ 40 °C          | 1 EA         |

## Vcheck M10 Analyzer

### Fast Results

Sample in → Result out  
in about 1 hour

### Multiplex

Maximum 12 targets  
in a cartridge

### Various Setting

Applicable for various species,  
sample types, pathogens



### Simple Procedure

Automated extraction,  
amplification,  
and data analysis

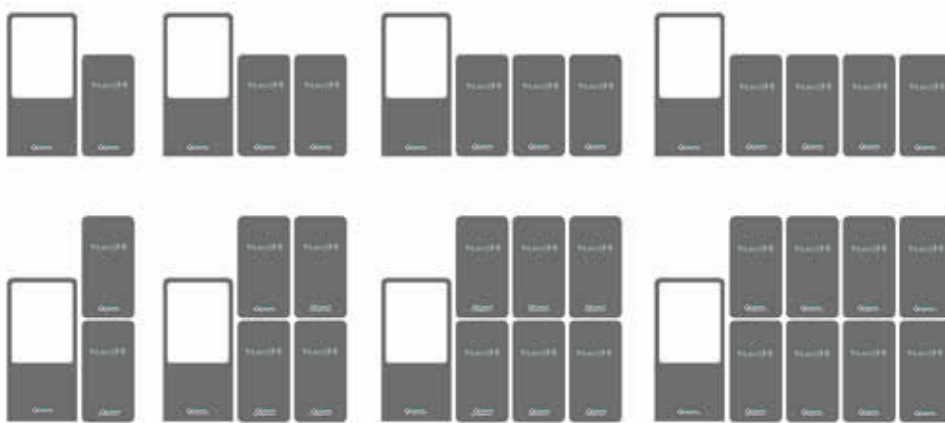
### Good Accuracy

High sensitivity  
and specificity

### Modular & Scalable

Scalable configuration with  
up to 8 modules

**Vcheck M10 can be used anywhere diagnostics are needed,  
from vet clinics to specialized laboratories**



**Vet clinic**



**Laboratory**

## Easy 4-Step Test Procedure

1 Scan the sample ID



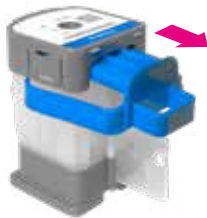
2 Scan the cartridge barcode



3 Apply the sample & close the cartridge



4 Insert the cartridge



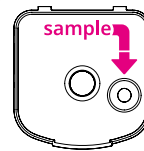
Remove the safety clip



Press down the lid



Dispense the sample



Close the lid

## Automatic Result Reading

- No need to set threshold or read result according to cut-off
- Ct value and amplification curve can be checked

### Summary



### Amplification



### Details



# Vcheck M

## Babesia gibsoni/canis

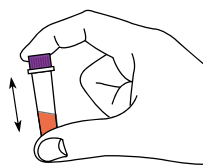
### Specification



|                         |                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Detection Target</b> | : <i>Babesia gibsoni</i><br><i>Babesia canis</i> ( <i>B. canis canis</i> , <i>B. canis vogeli</i> , <i>B. canis rossii</i> ) |
| <b>Species</b>          | : Canine                                                                                                                     |
| <b>Sample Type</b>      | : Whole blood (EDTA) 100 µl                                                                                                  |
| <b>Testing Time</b>     | : 60 minutes                                                                                                                 |
| <b>Shelf Life</b>       | : 12 months                                                                                                                  |

### Test Procedure

**1** Blood 100 µl + Buffer 500 µl



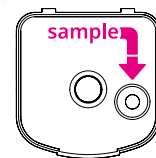
EDTA tube  
(purple cap)

+



Buffer tube  
(yellow cap)

**2** Dispense 600 µl of diluted sample



### Performance

| Country | Site           | Comparison test                 | <i>B. gibsoni</i> |       | <i>B. canis</i> |       |
|---------|----------------|---------------------------------|-------------------|-------|-----------------|-------|
|         |                |                                 | Sens.             | Spec. | Sens.           | Spec. |
| Korea   | Commercial lab | Real-time PCR, Sequencing       | 100%              | 100%  | 100%            | 100%  |
| Korea   | University lab | Conventional PCR, Real-time PCR | 100%              | 100%  | -               | 100%  |
| Poland  | University lab | Nested PCR, Sequencing          | 100%              | 100%  | 100%            | 100%  |
| Brazil  | Commercial lab | Real-time PCR                   | -                 | 100%  | -               | 100%  |

### Ordering Information

| Product No. | Product Name                   | Operating Condition | Packing Unit |
|-------------|--------------------------------|---------------------|--------------|
| VCM102AC    | Vcheck M Babesia gibsoni/canis | 2 ~ 28 °C           | 5 Tests/Kit  |

# Vcheck M

## Ehrlichia/Anaplasma

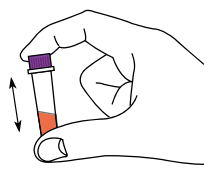
### Specification



|                         |                                                                                                                                               |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Detection Target</b> | : ① <i>Ehrlichia</i> spp. ( <i>E. canis</i> , <i>E. ewingii</i> )<br>② <i>Anaplasma</i> spp. ( <i>A. phagocytophilum</i> , <i>A. platys</i> ) |
| <b>Species</b>          | : Canine, Feline                                                                                                                              |
| <b>Sample Type</b>      | : Whole blood (EDTA) 100 µl                                                                                                                   |
| <b>Testing Time</b>     | : 70 minutes                                                                                                                                  |
| <b>Shelf Life</b>       | : 12 months                                                                                                                                   |

### Test Procedure

**1** Blood 100 µl + Buffer 500 µl



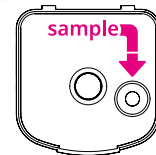
EDTA tube  
(purple cap)

+



Buffer tube  
(yellow cap)

**2** Dispense 600 µl of diluted sample



### Performance

| Country | Site           | Comparison test           | <i>Ehrlichia</i> spp. |       | <i>Anaplasma</i> spp. |       |
|---------|----------------|---------------------------|-----------------------|-------|-----------------------|-------|
|         |                |                           | Sens.                 | Spec. | Sens.                 | Spec. |
| Korea   | R&D department | Real-time PCR, Sequencing | 100%                  | 100%  | 100%                  | 100%  |
| Korea   | University lab | Conventional PCR          | -                     | 100%  | -                     | 100%  |
| Poland  | University lab | Nested PCR                | -                     | 100%  | 100%                  | 100%  |
| Brazil  | Commercial lab | Real-time PCR             | 100%                  | 100%  | 100%                  | 100%  |

### Ordering Information

| Product No. | Product Name                 | Operating Condition | Packing Unit |
|-------------|------------------------------|---------------------|--------------|
| VCM101AC    | Vcheck M Ehrlichia/Anaplasma | 2 ~ 28 °C           | 5 Tests/Kit  |

# Vcheck M

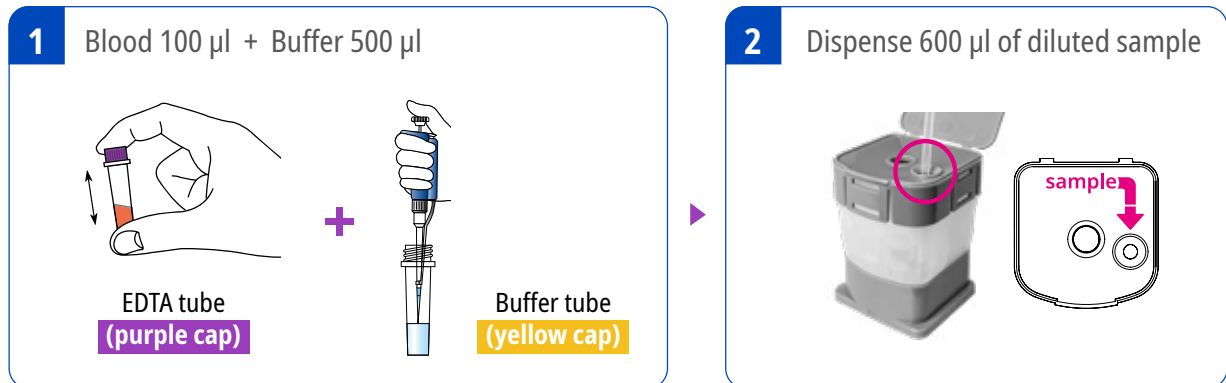
## Canine Vector 8 Panel

### Specification



|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Detection Target</b> | : ① <i>Ehrlichia</i> spp. ( <i>E. canis</i> , <i>E. ewingii</i> , <i>E. chaffeensis</i> )<br>② <i>Hepatozoon</i> spp. ( <i>H. americanum</i> , <i>H. canis</i> )<br>③ Canine hemotropic mycoplasma ( <i>M. haemocanis</i> )<br>④ <i>Anaplasma</i> spp. ( <i>A. phagocytophilum</i> , <i>A. platys</i> )<br>⑤ <i>Rickettsia rickettsii</i><br>⑥ <i>Babesia</i> spp. ( <i>B. gibsoni</i> , <i>B. canis canis</i> , <i>B. canis vogeli</i> , <i>B. canis rossi</i> )<br>⑦ <i>Leishmania</i> spp. ( <i>L. infantum</i> , <i>L. donovani</i> , <i>L. mexicana</i> )<br>⑧ <i>Bartonella</i> spp. ( <i>B. henselae</i> , <i>B. koehlerae</i> ) |
| <b>Species</b>          | : Canine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Sample Type</b>      | : Whole blood (EDTA) 100 µl                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Testing Time</b>     | : 70 minutes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Shelf Life</b>       | : 12 months                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

### Test Procedure



### Performance

#### Clinical performance<sup>1</sup>

|             | <i>Ehrlichia</i> | <i>Hepatozoon</i> | <i>Hemoplasma</i> | <i>Anaplasma</i> | <i>Rickettsia</i> | <i>Babesia</i> | <i>Leishmania</i> | <i>Bartonella</i> |
|-------------|------------------|-------------------|-------------------|------------------|-------------------|----------------|-------------------|-------------------|
| Sensitivity | 100%             | 100%              | 100%              | 100%             | -                 | 100%           | -                 | -                 |
| Specificity | 100%             | -                 | -                 | 100%             | -                 | 100%           | 100%              | -                 |

#### External evaluation<sup>2</sup>

Excellent performance is proven through SCI paper by yielding highly correlated results with real-time PCR.

|          | <i>Ehrlichia</i> | <i>Hepatozoon</i> | <i>Hemoplasma</i> | <i>Anaplasma</i> | <i>Rickettsia</i> | <i>Babesia</i> | <i>Leishmania</i> | <i>Bartonella</i> |
|----------|------------------|-------------------|-------------------|------------------|-------------------|----------------|-------------------|-------------------|
| Accuracy | 100% (4/4)       | 100% (3/3)        | 100% (15/15)      | 100% (20/20)     | -                 | 100% (29/29)   | 100% (1/1)        | 100% (7/7)        |

1. SD Biosensor

2. J Vet Res. 2024 Jun 20;68(2):215-222.

### Ordering Information

| Product No. | Product Name                   | Operating Condition | Packing Unit |
|-------------|--------------------------------|---------------------|--------------|
| VCM104AC    | Vcheck M Canine Vector 8 Panel | 2 ~ 28 °C           | 5 Tests/Kit  |

# Vcheck M SFTS

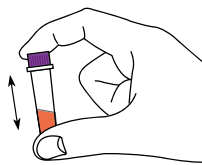
## Specification



|                         |                                                                                                                    |
|-------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Detection Target</b> | : Severe Fever with Thrombocytopenia Syndrome virus<br>( <i>Dabie bandavirus A, B, B-1, B-2, B-3, C, D, E, F</i> ) |
| <b>Species</b>          | : Canine, Feline                                                                                                   |
| <b>Sample Type</b>      | : Whole blood (EDTA) 100 µl                                                                                        |
| <b>Testing Time</b>     | : 70 minutes                                                                                                       |
| <b>Shelf Life</b>       | : 12 months                                                                                                        |

## Test Procedure

**1** Blood 100 µl + Buffer 500 µl



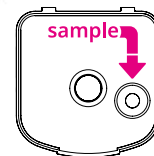
EDTA tube  
(purple cap)

+



Buffer tube  
(yellow cap)

**2** Dispense 600 µl of diluted sample



## Performance

**Analytical sensitivity (Limit of detection, LoD)**

|                 | <i>Ehrlichia</i>  |
|-----------------|-------------------|
| LOD (copies/mL) | $7.5 \times 10^2$ |

## Ordering Information

| Product No. | Product Name  | Operating Condition | Packing Unit |
|-------------|---------------|---------------------|--------------|
| VCM112AC    | Vcheck M SFTS | 2 ~ 28 °C           | 5 Tests/Kit  |

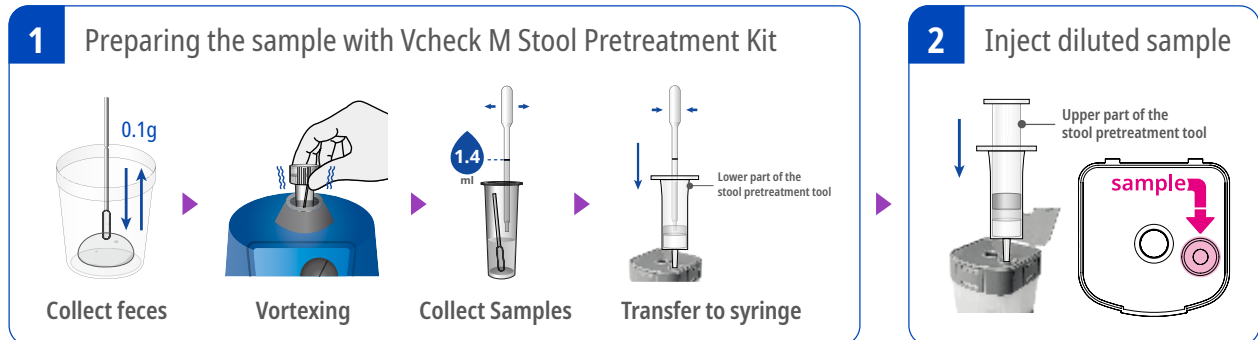
# Vcheck M Canine Diarrhea 8 Panel

## Specification



|                         |                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Detection Target</b> | : ① Canine parvovirus type 2<br>② Canine coronavirus<br>③ Canine distempervirus<br>④ <i>Giardia lamblia</i><br>⑤ <i>Cryptosporidium</i> spp.<br>⑥ <i>Salmonella</i> spp. ( <i>S. typhimurium</i> , <i>S. enteritidis</i> )<br>⑦ <i>Clostridium perfringens</i><br>(alpha toxin gene, enterotoxin gene, netE/F toxin gene)<br>⑧ <i>Campylobacter</i> spp. ( <i>C. coli</i> , <i>C. jejuni</i> ) |
| <b>Species</b>          | : Canine                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Sample Type</b>      | : Feces 0.1g                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Testing Time</b>     | : 70 minutes                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Shelf Life</b>       | : 12 months                                                                                                                                                                                                                                                                                                                                                                                    |

## Test Procedure



## Performance

**Analytical sensitivity<sup>1</sup>** (Limit of detection, LoD)

|                 | <i>Campylobacter</i> spp. | <i>Salmonella</i> spp. | Canine coronavirus  | Canine distempervirus | <i>Cryptosporidium</i> spp. | Canine parvovirus 2 | <i>Clostridium perfringens</i> | <i>Giardia lamblia</i> |
|-----------------|---------------------------|------------------------|---------------------|-----------------------|-----------------------------|---------------------|--------------------------------|------------------------|
| LoD (copies/mL) | 2.7X10 <sup>3</sup>       | 2.7X10 <sup>3</sup>    | 2.7X10 <sup>3</sup> | 2.7X10 <sup>3</sup>   | 2.7X10 <sup>3</sup>         | 2.7X10 <sup>3</sup> | 2.7X10 <sup>3</sup>            | 9X10 <sup>2</sup>      |

**Clinical evaluation<sup>2</sup>** (Compared to Conventional PCR & Real-time PCR)

|             | <i>Campylobacter</i> spp. | <i>Salmonella</i> spp. | Canine coronavirus | Canine distempervirus | <i>Cryptosporidium</i> spp. | Canine parvovirus 2 | <i>Clostridium perfringens</i> | <i>Giardia lamblia</i> |
|-------------|---------------------------|------------------------|--------------------|-----------------------|-----------------------------|---------------------|--------------------------------|------------------------|
| Sensitivity | 100% (4/4)                | -                      | 100% (14/14)       | -                     | 100% (1/1)                  | 100% (19/19)        | 100% (58/58)                   | 100% (3/3)             |
| Specificity | 100% (87/87)              | 98.9% (91/92)          | 100% (80/80)       | 100% (91/91)          | 100% (91/91)                | 100% (78/78)        | 100% (39/39)                   | 100% (89/89)           |

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

## Ordering Information

| Product No. | Product Name                     | Operating Condition | Packing Unit |
|-------------|----------------------------------|---------------------|--------------|
| VCM107AC    | Vcheck M Canine Diarrhea 8 Panel | 2 ~ 28 °C           | 5 Tests/Kit  |
| (Included)  | Vcheck M Stool Pretreatment Kit  | 2 ~ 28 °C           | 5 Tests/Kit  |

# Vcheck M

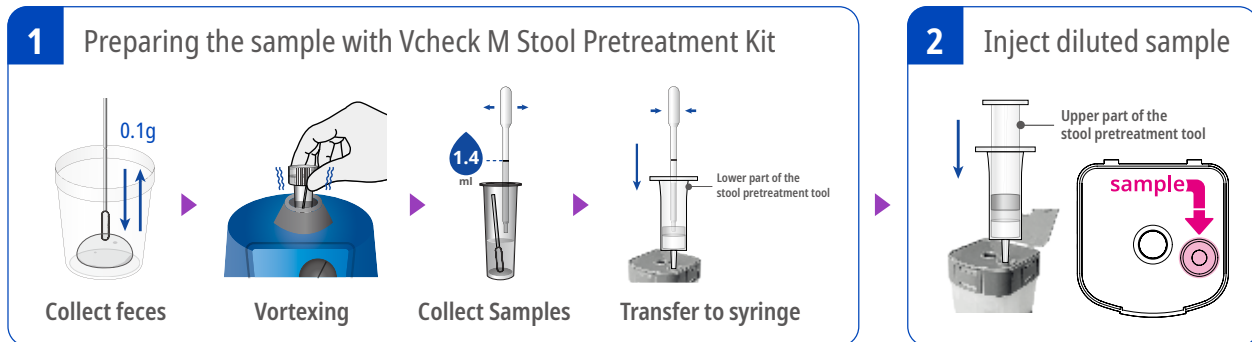
## Feline Diarrhea 8 Panel

### Specification



|                         |                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Detection Target</b> | : ① Feline parvovirus<br>② Feline coronavirus<br>③ <i>Giardia lamblia</i><br>④ <i>Tritrichomonas blagburni</i> (formerly <i>T. foetus</i> )<br>⑤ <i>Toxoplasma gondii</i><br>⑥ <i>Salmonella</i> spp. ( <i>S. typhimurium</i> , <i>S. enteritidis</i> )<br>⑦ <i>Campylobacter</i> spp. ( <i>C. coli</i> , <i>C. jejuni</i> )<br>⑧ <i>Cryptosporidium</i> spp. |
| <b>Species</b>          | : Feline                                                                                                                                                                                                                                                                                                                                                      |
| <b>Sample Type</b>      | : Feces 0.1g                                                                                                                                                                                                                                                                                                                                                  |
| <b>Testing Time</b>     | : 70 minutes                                                                                                                                                                                                                                                                                                                                                  |
| <b>Shelf Life</b>       | : 12 months                                                                                                                                                                                                                                                                                                                                                   |

### Test Procedure



### Performance

**Analytical sensitivity<sup>1</sup>** (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 <sup>3</sup>       | 2.7X10 <sup>3</sup>    | 9X10 <sup>2</sup>  | 2.7X10 <sup>3</sup>      | 2.7X10 <sup>3</sup>         | 9X10 <sup>2</sup> | 2.7X10 <sup>3</sup>             | 9X10 <sup>2</sup>      |

**Clinical evaluation<sup>2</sup>** (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  |
| (Included)  | Vcheck M Stool Pretreatment Kit  | 2 ~ 28 °C           | 5 Tests/Kit  |

# Vcheck M FIV/FeLV

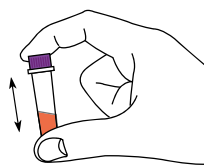
## Specification



|                         |                                                          |
|-------------------------|----------------------------------------------------------|
| <b>Detection Target</b> | : Feline immunodeficiency virus<br>Feline leukemia virus |
| <b>Species</b>          | : Feline                                                 |
| <b>Sample Type</b>      | : Whole blood (EDTA) 100 µl                              |
| <b>Testing Time</b>     | : 70 minutes                                             |
| <b>Shelf Life</b>       | : 12 months                                              |

## Test Procedure

**1** Blood 100 µl + Buffer 500 µl



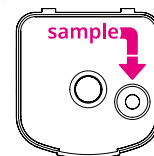
EDTA tube  
(purple cap)

+



Buffer tube  
(yellow cap)

**2** Dispense 600 µl of diluted sample



## Performance

**Analytical sensitivity** (Limit of detection, LoD)

|                 | <b>FIV</b>        | <b>FeLV</b>       |
|-----------------|-------------------|-------------------|
| LOD (copies/ml) | $1.4 \times 10^3$ | $1.4 \times 10^3$ |

## Ordering Information

| Product No. | Product Name      | Operating Condition | Packing Unit |
|-------------|-------------------|---------------------|--------------|
| VCM109AC    | Vcheck M FIV/FeLV | 2 ~ 28 °C           | 5 Tests/Kit  |

# Vcheck M

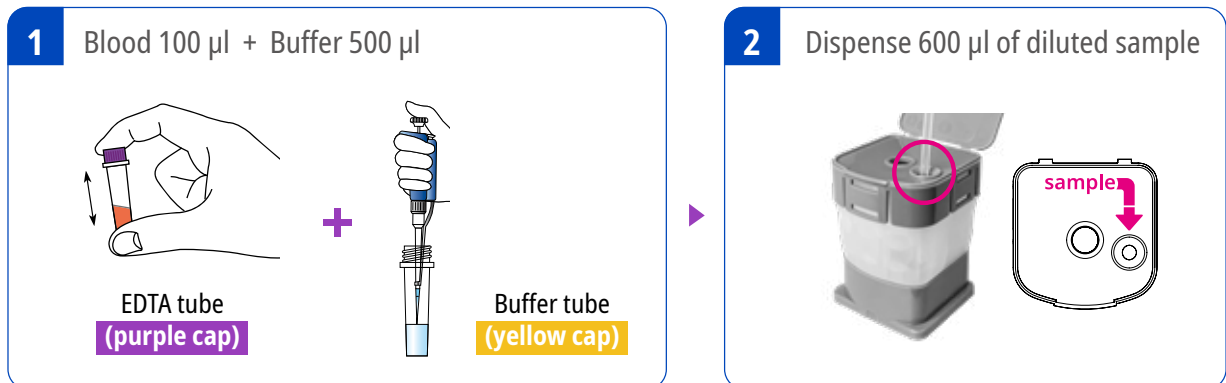
## Canine Anemia 8 Panel

### Specification



|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Detection Target</b> | : ① <i>Ehrlichia</i> spp. ( <i>E. canis</i> , <i>E. ewingii</i> , <i>E. chaffeensis</i> )<br>② <i>Hepatozoon</i> spp. ( <i>H. americanum</i> , <i>H. canis</i> )<br>③ Canine hemotropic mycoplasma ( <i>M. haemocanis</i> )<br>④ <i>Anaplasma</i> spp. ( <i>A. phagocytophilum</i> , <i>A. platys</i> )<br>⑤ <i>Rickettsia rickettsii</i><br>⑥ <i>Babesia</i> spp. ( <i>B. gibsoni</i> , <i>B. canis canis</i> , <i>B. canis vogeli</i> , <i>B. canis rossii</i> )<br>⑦ <i>Leptospira interrogans</i> (sv. Autumnalis, Grippotyphosa, Bratislava, Pomona, Canicola, Icterohaemorrhagiae)<br>⑧ <i>Borrelia</i> spp. ( <i>B. burgdorferi</i> , <i>B. afzelii</i> , <i>B. garinii</i> ) |
| <b>Species</b>          | : Canine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Sample Type</b>      | : Whole blood (EDTA) 100 µl                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Testing Time</b>     | : 70 minutes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Shelf Life</b>       | : 12 months                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

### Test Procedure



### Performance

**Analytical sensitivity** (Limit of detection, LoD)

|                 | <i>Ehrlichia</i> | <i>Hepatozoon</i> | Hemoplasma        | <i>Anaplasma</i>  | <i>Rickettsia</i> | <i>Babesia</i>    | <i>Leptospira</i> | <i>Borrelia</i>   |
|-----------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| LOD (copies/ml) | $3 \times 10^3$  | $2.4 \times 10^4$ | $2.4 \times 10^4$ | $1.2 \times 10^4$ | $6 \times 10^3$   | $2.4 \times 10^4$ | $2.4 \times 10^4$ | $1.2 \times 10^4$ |

**Clinical performance**

|             | <i>Ehrlichia</i> | <i>Hepatozoon</i> | Hemoplasma | <i>Anaplasma</i> | <i>Rickettsia</i> | <i>Babesia</i> | <i>Leptospira</i> | <i>Borrelia</i> |
|-------------|------------------|-------------------|------------|------------------|-------------------|----------------|-------------------|-----------------|
| Sensitivity | 100%             | 100%              | 100%       | 100%             | -                 | 100%           | -                 | -               |
| Specificity | 100%             | -                 | -          | 100%             | -                 | 100%           | 100%              | -               |

### Ordering Information

| Product No. | Product Name                   | Operating Condition | Packing Unit |
|-------------|--------------------------------|---------------------|--------------|
| VCM105AC    | Vcheck M Canine Anemia 8 Panel | 2 ~ 28 °C           | 5 Tests/Kit  |

# Vcheck M

## Canine Respiratory 8 Panel

### Specification



#### Detection Target

- : ① Canine adenovirus type 2
- ② Canine distemper virus
- ③ Canine Parainfluenza virus
- ④ Canine Respiratory coronavirus
- ⑤ *Mycoplasma cynos*
- ⑥ Canine Influenza virus
- ⑦ *Bordetella bronchiseptica*
- ⑧ Canine herpesvirus type 1

#### Species

: Canine

#### Sample Type

: Conjunctival swab and Deep pharyngeal swab

#### Testing Time

: 70 minutes

#### Shelf Life

: 12 months

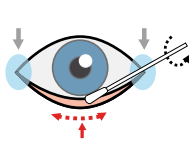
### Test Procedure

#### 1 Vortex and invert the tube for 10 Seconds

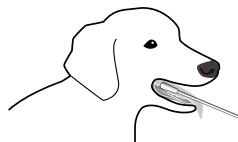
Do not scrape  
the blue area

Be careful not to touch the  
tongue or too much saliva

10 sec



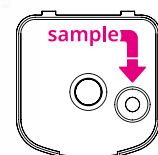
Scrape the red area



Scrape the pharyngeal area



#### 2 Dispense 300 µl of the thoroughly mixed sample



### Performance

#### Analytical sensitivity (Limit of detection, LoD)

|                    | CAV-2             | CDV                | CPIV               | CRCoV            | M.cynos        | CIV               | B.bronchiseptica | CHV-1              |
|--------------------|-------------------|--------------------|--------------------|------------------|----------------|-------------------|------------------|--------------------|
| LOD<br>(copies/ml) | 0.02<br>TCID50/mL | 49.52<br>TCID50/mL | 92.79<br>TCID50/mL | 800<br>copies/mL | 0.37<br>CFU/mL | 0.03<br>TCID50/ml | 145.83<br>CFU/mL | 94800<br>TCID50/ml |

### Ordering Information

| Product No. | Product Name                        | Operating Condition | Packing Unit |
|-------------|-------------------------------------|---------------------|--------------|
| VCM110AC    | Vcheck M Canine Respiratory 8 Panel | 2 ~ 28 °C           | 5 Tests/Kit  |

# Vcheck M

## Feline Respiratory 7 Panel

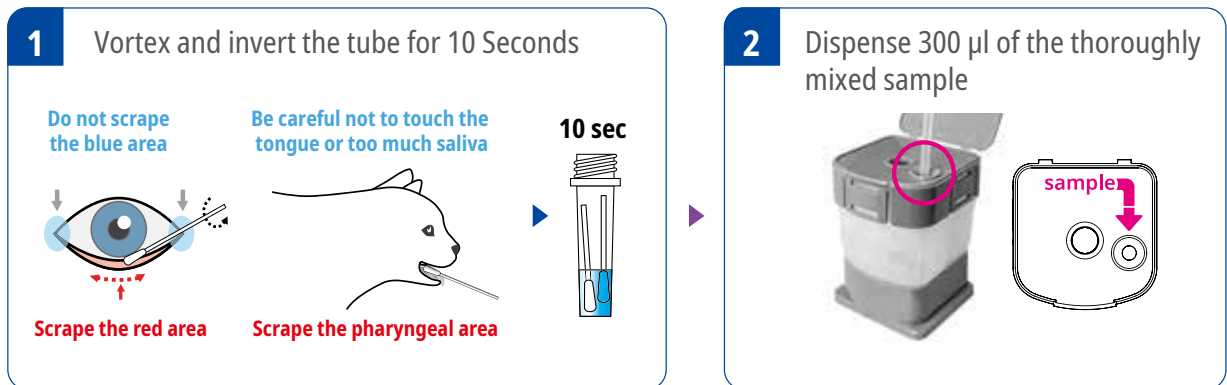
### Specification



**Detection Target** : ① Feline herpesvirus type 1  
 ② Feline calicivirus  
 ③ Influenza virus  
 ④ *Bordetella bronchiseptica*  
 ⑤ *Mycoplasma felis*  
 ⑥ *Chlamydia felis*  
 ⑦ *Streptococcus zooepidemicus*

**Species** : Feline  
**Sample Type** : Conjunctival swab and Deep pharyngeal swab  
**Testing Time** : 70 minutes  
**Shelf Life** : 12 months

### Test Procedure



### Performance

**Analytical sensitivity** (Limit of detection, LoD)

|                 | FHV-1               | FCV                 | Influenza virus     | <i>B. bronchiseptica</i> | <i>M. felis</i>     | <i>C. felis</i>     | SEZ                 |
|-----------------|---------------------|---------------------|---------------------|--------------------------|---------------------|---------------------|---------------------|
| LOD (copies/ml) | 3.3x10 <sup>2</sup> | 3.3x10 <sup>2</sup> | 6.7x10 <sup>2</sup> | 3.3x10 <sup>2</sup>      | 6.7x10 <sup>2</sup> | 3.3x10 <sup>2</sup> | 3.3x10 <sup>2</sup> |

### Ordering Information

| Product No. | Product Name                        | Operating Condition | Packing Unit |
|-------------|-------------------------------------|---------------------|--------------|
| VCM111AC    | Vcheck M Feline Respiratory 7 Panel | 2 ~ 28 °C           | 5 Tests/Kit  |

# Vcheck M

## Ordering Information

### Analyzer

|          | Product            | Contents                 | Cat No.  |
|----------|--------------------|--------------------------|----------|
| Analyzer | Vcheck M10 Console | M10 Console (Controller) | VCN752EA |
|          | Vcheck M10 Module  | M10 Module (Analyzer)    | VCN753EA |

### Cartridge

|                  | Product                          | Detection Target                                                                                                                                                                                                                                | Cat No.  |
|------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Companion Animal | Vcheck M Ehrlichia/Anaplasma     | <i>Ehrlichia</i> spp.<br><i>Anaplasma</i> spp.                                                                                                                                                                                                  | VCN101AC |
|                  | Vcheck M Babesia gibsoni/canis   | <i>Babesia gibsoni</i><br><i>Babesia canis</i>                                                                                                                                                                                                  | VCN102AC |
|                  | Vcheck M Canine Vector 8 Panel   | <i>Ehrlichia</i> spp.<br><i>Hepatozoon</i> spp.<br>Canine hemotropic mycoplasma (CHM)<br><i>Anaplasma</i> spp.<br><i>Rickettsia rickettsii</i><br><i>Babesia</i> spp.<br><i>Leishmania</i> spp.<br><i>Bartonella</i> spp.                       | VCN104AC |
|                  | Vcheck M Canine Anemia 8 Panel   | <i>Ehrlichia</i> spp.<br><i>Hepatozoon</i> spp.<br>Canine hemotropic mycoplasma (CHM)<br><i>Anaplasma</i> spp.<br><i>Rickettsia rickettsii</i><br><i>Babesia</i> spp.<br><i>Leptospira interrogans</i><br><i>Borrelia</i> spp.                  | VCN105AC |
|                  | Vcheck M FIV/FelV                | Feline immunodeficiency virus (FIV)<br>Feline leukemia virus (FeLV)                                                                                                                                                                             | VCN109AC |
|                  | Vcheck M Canine Diarrhea 8 Panel | Canine parvovirus type 2 (CPV-2)<br>Canine coronavirus (CCoV)<br>Canine distemper virus (CDV)<br><i>Giardia lamblia</i><br><i>Cryptosporidium</i> spp.<br><i>Salmonella</i> spp.<br><i>Clostridium perfringens</i><br><i>Campylobacter</i> spp. | VCN107AC |
|                  | Vcheck M Feline Diarrhea 8 Panel | Feline parvovirus (FPV)<br>Feline coronavirus (FCoV)<br><i>Giardia lamblia</i><br><i>Tritrichomonas blagburni</i><br><i>Toxoplasma gondii</i><br><i>Salmonella</i> spp.<br><i>Campylobacter</i> spp.<br><i>Cryptosporidium</i> spp.             | VCN108AC |

# Vcheck M

## Ordering Information

### Cartridge

|                     | Product                             | Detection Target                                                                                                                                                                                                                         | Cat No.  |
|---------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Companion<br>Animal | Vcheck M Canine Respiratory 8 Panel | Canine adenovirus type 2<br>Canine distemper virus<br>Canine Parainfluenza virus<br>Canine Respiratory coronavirus<br><i>Mycoplasma cynos</i><br>Canine Influenza virus<br><i>Bordetella bronchiseptica</i><br>Canine herpesvirus type 1 | VCM110AC |
|                     | Vcheck M Feline Respiratory 7 Panel | Feline herpesvirus type 1<br>Feline calicivirus<br>Influenza virus<br><i>Bordetella bronchiseptica</i><br><i>Mycoplasma felis</i><br><i>Chlamydophila felis</i><br><i>Streptococcus zooepidemicus</i>                                    | VCM111AC |
|                     | Vcheck M SFTS                       | Severe Fever with Thrombocytopenia<br>Syndrome virus                                                                                                                                                                                     | VCM112AC |

# Vcheck M

State-of-the-art POC Molecular Diagnostic System