

# Vcheck M **for Lab**

State-of-the-art POC Molecular Diagnostic System



# Vcheck M10

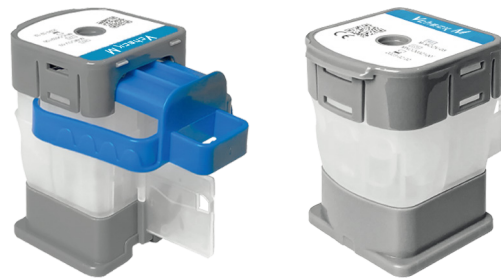
## State-of-the-art POC MDx System

- 10.1" touch screen
- User-friendly interface with animated guide
- Stored up to 5,000 results
- Seamless connectivity with HIS/LIS
- Minimum maintenance requirements
- Intuitive status indicator
- Compact size
- Customized configuration up to 8 modules



## All-in-one Cartridge

- Simple 'Sample-in Result-out' workflow
- Result in an hour
- Reliable result by accumulated technologies
- Multiplex assay up to 12-plex including IC
- Room temperature storage
- Prevention of contamination & easy disposal



## Easy Test Procedure

1 Scan the sample ID



2 Scan the cartridge code



3 Apply the sample & close the cartridge



4 Insert the cartridge



# Excellent Performance

## 1. Vcheck M Ehrlichia/Anaplasma

- Evaluation - R&D department

Target	Sensitivity	Specificity	Comparison test / Confirmatory test	Note
<i>Ehrlichia</i> spp.	100% (18/18)	100% (17/17)	Real-time PCR / Sequencing	5 inconsistent results ▶ Sequencing
<i>Anaplasma</i> spp.	100% (3/3)	100% (32/32)		

## 2. Vcheck M Babesia gibsoni/canis

- Evaluation - Commercial Lab (Korea)

Target	Sensitivity	Specificity	Comparison test / Confirmatory test	Note
<i>Babesia gibsoni</i>	100% (54/54)	100% (6/6)	Real-time PCR / Sequencing	<i>B. canis</i> positive result ▶ 1 <sup>st</sup> discovery in Korea
<i>Babesia canis</i>	100% (1/1)	100% (59/59)		

- Evaluation - University, College of Veterinary Medicine (Korea)

Target	Sensitivity	Specificity	Comparison test / Confirmatory test	Note
<i>Babesia gibsoni</i>	100% (15/15)	100% (13/13)	Conventional PCR / Real-time PCR	1 inconsistent result ▶ Real-time PCR

- Evaluation - University, College of Veterinary Medicine (Poland)

Target	Sensitivity	Specificity	Comparison test / Confirmatory test	Note
<i>Babesia gibsoni</i>	100% (1/1)	100% (86/86)	Conventional PCR / Sequencing	-
<i>Babesia canis</i>	100% (58/58)	100% (29/29)		

## 3. Vcheck M Canine Vector/Anemia 8 Panel

- Analytical Sensitivity:

Target	Hepatozoon	Ehrlichia	Anaplasma	Hemoplasma	Babesia
LOD (copies/mL)	2.4 x 10 <sup>4</sup>	3 x 10 <sup>3</sup>	1.2 x 10 <sup>4</sup>	2.4 x 10 <sup>4</sup>	2.4 x 10 <sup>4</sup>

Target	Rickettsia	Bartonella	Leishmania	Borrelia	Leptospira
LOD (copies/mL)	2.4 x 10 <sup>4</sup>	3 x 10 <sup>3</sup>	1.2 x 10 <sup>4</sup>	1.2 x 10 <sup>4</sup>	2.4 x 10 <sup>4</sup>

- Analytical Specificity: No cross-reaction with potential substance
- Scheduled Clinical Evaluation - Poland, Thailand, Australia, Brazil, USA, etc

# Target 1. [Lab] Considering PCR Set-up

## Point 1 Cost Efficient Set-up With M10

A. Existing PCR **VS** B. Vcheck M10

Labor Cost	Facility Management Cost	Equipment Cost	R&D Cost
A. Professional PCR Experimenter	A. Minimum workspace 3m <sup>2</sup>	A. Extraction, amplification, fridge, etc.	A. R&D of different pathogen kit
B. None-professional user	B. Minimum workspace 0.5m <sup>2</sup>	B. Single Console & Module	B. Zero R&D cost

Estimated Cost Reduction Rate by using M10

▼  
20~30%

▼  
60~70%

▼  
70~80%

▼  
100%

Overall, Save Up to 70~80% on Set-up

\* Standard : Korea

## Point 2 Maximization of User Convenience

Hands on preparation time :  
1 minute



Full automation of PCR test,  
Result in 1 hour with M10

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## Target 2. [Lab] Fully PCR Equipped

Point 1

### Express PCR Service

- Full automation of PCR test, result in 1 hour with M10
- M10 in regional branch ► Maximizing the effect of Express PCR service
- Sales increase through high value-added items

Point 2

### Regional Branch with M10

- Opening a smaller scale regional branch at transportation hub
- Optimal for new set-up of PCR (cost reduction up to 70~80%)
- Reduction of transportation cost/time & PCR testing time

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## Target 3. [Lab] Outsourcing PCR Test

Point 1

### In-house PCR Testing

- No more outsourcing to commercial labs
- Remove vulnerability by not depending on commercial labs

Point 2

### Faster Result, Higher Customer Satisfaction

- Reduce time waste by testing whenever it is required
- Reduction of transportation cost/time & PCR testing time
- Provide result in an hour for higher customer satisfaction

# Other POC PCR vs M10

## Comparison Point

Vcheck M	VS	Competitor
<b>Simplification of the test</b>		
<ul style="list-style-type: none"><li>• Fully automated all step (NA extraction, amplification)<ul style="list-style-type: none"><li>- Only M10 and Cartridge required for testing</li><li>- Various sample types can be used</li></ul></li><li>• All-in-one Cartridge type<ul style="list-style-type: none"><li>- Just 1 minute for Hands-on preparation</li><li>- Tester proficiency does not affect the result</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Only NA amplification is automated<ul style="list-style-type: none"><li>- Separate equipment &amp; reagent for extraction required</li><li>- Various test steps : NA extraction and amplification</li></ul></li><li>• Assembly-needed Cartridge type or Reagent type<ul style="list-style-type: none"><li>- Complicated test steps including cartridge assembly or trained pipetting</li><li>- Results affected by the proficiency of the tester</li></ul></li></ul>	
<b>Short Testing Time</b>		
<ul style="list-style-type: none"><li>• Result in an hour</li></ul>	<ul style="list-style-type: none"><li>• 2 hours or more</li></ul>	
<b>Multiplex assay up to 8-plex</b>		
<ul style="list-style-type: none"><li>• Multiplex assay up to 8-plex<ul style="list-style-type: none"><li>- Various pathogens test with 1 sample</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Usually, 1 pathogen test possible</li><li>• Some 4 to 6 pathogen tests</li></ul>	
<b>Room Temperature Storage</b>		
<ul style="list-style-type: none"><li>• Room temperature (2~28 °C) storage Cartridge</li></ul>	<ul style="list-style-type: none"><li>• Reagents that require frozen/refrigerated storage</li></ul>	

# Ordering Information

## Analyzer

Product	Contents	Cat No.
Vcheck M10 Console	M10 Console (Controller)	VCM752EA
Vcheck M10 Module	M10 Module (Analyzer)	VCM753EA

## Cartridge

Product	Pathogen	Cat No.
Vcheck M Ehrlichia/Anaplasma	<i>Ehrlichia</i> spp., <i>Anaplasma</i> spp.	VCM101AC
Vcheck M Babesia gibsoni/canis	<i>Babesia gibsoni</i> , <i>Babesia canis</i>	VCM102AC
Vcheck M Canine Vector 8 Panel*	<i>Ehrlichia</i> spp., <i>Anaplasma</i> spp., <i>Babesia</i> spp., <i>Leishmania</i> spp., <i>Rickettsia</i> spp., <i>Bartonella</i> spp., Canine hemotropic mycoplasma (CHM), <i>Hepatozoon</i> spp.	VCM104AC
Vcheck M Canine Anemia 8 Panel*	<i>Ehrlichia</i> spp., <i>Anaplasma</i> spp., <i>Babesia</i> spp., <i>Borrelia</i> spp. (Lyme disease), <i>Rickettsia</i> spp., <i>Leptospira</i> spp., Canine hemotropic mycoplasma (CHM), <i>Hepatozoon</i> spp.	VCM105AC
Vcheck M ASFV*	ASFV	-
Vcheck M Canine Diarrhea 8 Panel*	Canine parvovirus type 2 (CPV-2), Enteric coronavirus (CECoV), Canine distemper virus (CDV), <i>Giardia</i> spp., <i>Cryptosporidium</i> spp., <i>Salmonella</i> spp., <i>Clostridium perfringens</i> , <i>Campylobacter</i> spp.	-
Vcheck M Canine Respiratory 8 Panel*	Canine distemper virus (CDV), Canine adenovirus type 2 (CAV-2), <i>Bordetella bronchiseptica</i> , Canine influenza virus (CIV), Canine parainfluenza virus (CPIV), Canine herpesvirus type 1 (CHV-1), Canine respiratory coronavirus (CRCoV), <i>Mycoplasma cynos</i>	-
Vcheck M Feline Diarrhea 8 Panel*	Feline panleukopenia virus (FPV), Feline coronavirus (FCoV), <i>Giardia</i> spp., <i>Trichomonas foetus</i> , <i>Toxoplasma gondii</i> , <i>Salmonella</i> spp., <i>Clostridium perfringens</i> , <i>Cryptosporidium</i> spp.	-
Vcheck M Feline Respiratory 6 Panel*	Feline herpesvirus type 1 (FHV-1), Feline calicivirus (FCV), <i>Mycoplasma felis</i> , <i>Chlamydia felis</i> , Influenza virus, <i>Bordetella bronchiseptica</i>	-
Vcheck M Feline Anemia 7 Panel*	Feline immunodeficiency virus (FIV), Feline leukemia virus (FeLV), <i>Ehrlichia</i> spp., <i>Anaplasma</i> spp., <i>Bartonella</i> spp., <i>Cytauxzoon felis</i> , Feline hemotropic mycoplasma (FHM)	-
Vcheck M FIV/FeLV*	FIV, FeLV	-

\* marked products will be launched in next

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# MEMO