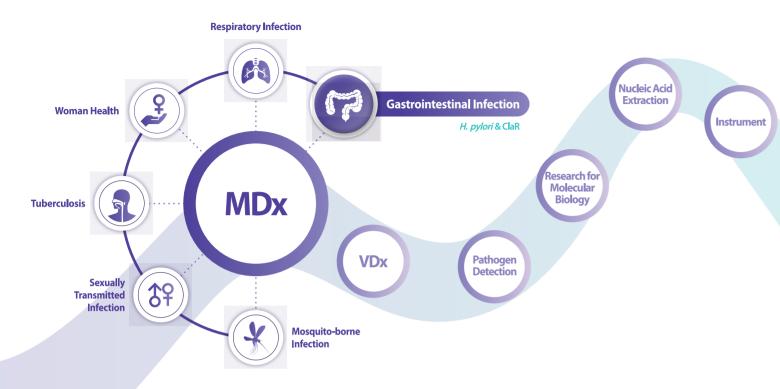
#### **M monitor** stands in all areas of **Molecular Diagnostics**.



#### **ORDERING INFORMATION**

Category	Target	Cat. No.	Product	Specimen	Volume
MmaxSure	Helicobacter pylori & Clarithromycin resistance	52307	MmaxSure™ <i>H. pylori</i> & ClaR	Stomach biopsy	50 tests

» Please contact us for bulk order.

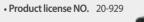
#### **EXTRACTION REGENT** (Optional)

Mmaxpre	ss <sup>®</sup> DNA kit HS2
• Cat. No.	92203
<ul> <li>Application</li> </ul>	Nucleic acid extraction
<ul> <li>Specification</li> </ul>	8ml



#### **COMPATIBLE INSTRUMENT**

DuxCycler		MXM-I
• Cat. No.	82301	• Cat. No.
<ul> <li>Application</li> </ul>	Nucleic acid amplification	<ul> <li>Applicati</li> </ul>
Specification	150*150*150(mm) 25wells/0.2mℓ tube	<ul> <li>Specifica</li> </ul>
	22.020	





1XM-L1 82302 pplication Nucleic acid amplification pecification 130 \* 130 \* 90 (mm) 8 wells/0.2 ml tube, 2 wells/0.2 ml tube



» We recommend two kinds of isothermal amplifiers above, however, conventional PCR or real-time PCR instruments are also available if they can be set-up to constant temperature for isothermal reactions.

#### 

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M monitor introduces a real advance in point-of-care molecular diagnostics of Helicobacter pylori infections and their clarithromycin resistance that is radically faster, cheaper, and more reliable than the conventional methods.



野湯

www.mmonitor.net



2143G and 2182C were major point mutations.

## **BEYOND CONVENIENCE** MmaxSure™ H. pylori & ClaR

#### A complete kit with all you need



## Actualize NEW types of MDx

ALL DIAGNOSIS START AT 1 PLATFORM TECHNOLOGY.

#### **CHECK**

#### H. pylori infection and Clarithromycin **AT ONCE !**

Helicobacter pylori as a "group 1 definite carcinogen"

- IARC (International Agency for Research on Cancer)

The association between H. pylori and gastric cancer has attracted great interest worldwide. Gastric cancer is one of the most common malignancies in the world, although the incidence and mortality rate have been decreasing in recent decades.

sistance				M monitor
	_			+++
Category	CLO test	PCR		
Accuracy	+	++++	8	+++
Sensitivity	+	++		+++
Required time	+++	+	-	+++
Extraction method	+++ (Simp <b>l</b> e)	+ (Comp <b>l</b> icated)		(Simple)
Result checking method	+++ (Simp <b>l</b> e)	+ (Comp <b>l</b> icated)		+++
Resistant test	(None)	++ (Partia)	_	(Simple)
Equipment dependency	N/A	(Restricted)		(Available)
				+++

(No dependency)



#### **M MONITOR DETECTION METHOD**





Both tissues obtained from stomach biopsy or obtained after CLO test are available.



Simple and easy direct extraction methods are available as well as all kinds of extraction method such as using column and bead type.

**Fast amplification of** nucleic acid



Only 30 minutes takes to amplify nucleic under isothermal conditions. **Confirm the result** with naked eyes



Amplified targets can be confirmed by identifying color change of solution with naked eyes without using any additional devices.

#### **HOW TO PRESCRIBE AFTER RESULTS?**

Precise antibiotic prescription by confirming drug-resistant (Clarithromycin) mutation.

No.		Tube	Tube color		Discussio
NO.	2143G	2182C	H. pylori	N.C	Diagnosis
1	+		+	N	Metronidazole-based quadruple therapy
2	+	-	+	N	Metronidazole-based quadruple therapy
3	-		+	N	Clarithromycin-based triple therapy Highly clarithromycin resistance
4	-		+	N	Clarithromycin-based triple therapy are detected simultaneously
5	-	-	-	N	Negative

#### WHY IS CLARITHROMYCIN RESISTANT TEST IMPORTANT?

A proton-pump inhibitor(PPI), clarithromycin-based, triple therapy has been the recommended treatment for Helicobacter pylori eradication for the past 20 years. Due to a steady increase in *H. pylori* resistance to clarithromycin, the growth rate of the eradication treatment is progressively decreasing. So, information on strain resistance is crucial in selecting an appropriate treatment for efficient patient care.

#### Provide more timely, effectively and economically treatment.

MmaxSure<sup>™</sup> H. pylori & ClaR have an impact on improving the availability and accuracy of information on H. pylori antimicrobial resistance to guide in the selection of primary treatment.

#### WHAT IS THE SPECIALTY?

Although the current therapy is effective, a high rate of treatment failure has been observed, mainly because of the acquisition of point mutations. M monitor has improved the accuracy of Clarithromycin resistant by detecting other marker compared to existing products.

> As a result of sequence analysis of strains that were both *H. pylori* positive and failed eradication (i.e. non-effective of clarithromycin), it was confirmed that 2143G and 2182C were major point mutations.

#### **Detection Marker**



#### REFERENCE

Conventional

PCR product

2143G

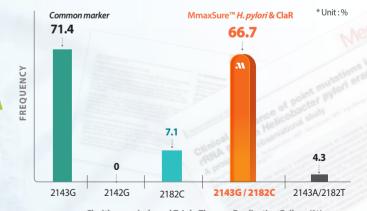
2142G

- Medicine (Baltimore). 2018 Aug;97(33):e11835.
- J Microbiol Biotechnol. 2008 Sep;18(9):1584-9.

REYOND CONVENIENC



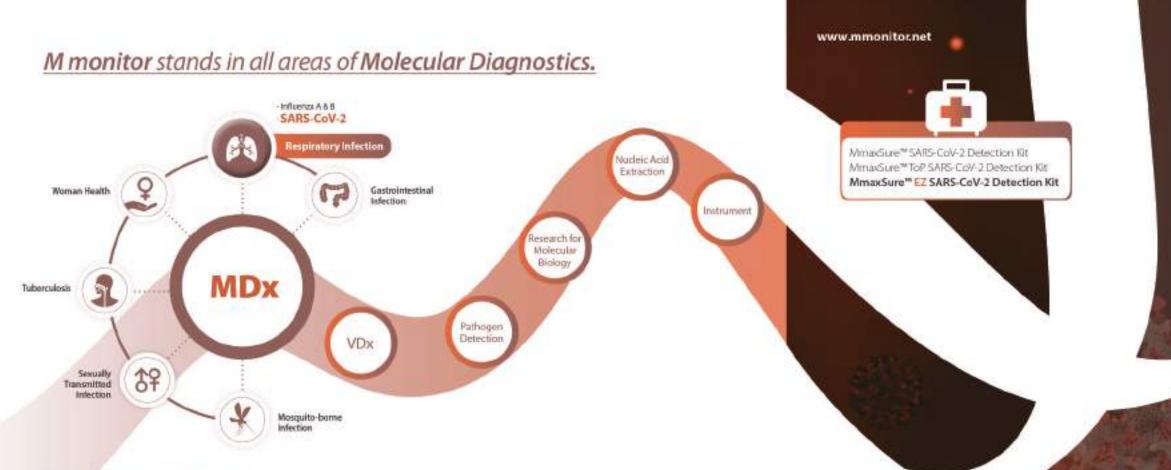




Clarithromycin-based Triple Therapy Eradication Failure (%)

1. Park CG, et al. Clinical relevance of point mutations in the 23S rRNA gene in Helicobacter pylori eradication: A prospective, observational study.

2. Kim JM, et al. Gene mutations of 23S rRNA associated with clarithromycin resistance in Helicobacter pylori strains isolated from Korean patients.



#### ORDERING INFORMATION

Category	Target	Cat. No.	Product	Specimen	Volume
	RdRP gene, N gene	52230	MmaxSure <sup>m</sup> EZ SARS-CoV-2 Detection Kit	Nasopharyngeal swab     Oropharyngeal swab	25 Tests



» We recommend two kinds of sothermal amplifiers above, howerver, conventional PCR or real-time PCR instruments are also available if they can be set-up to constant temperature for isothermal reactions.

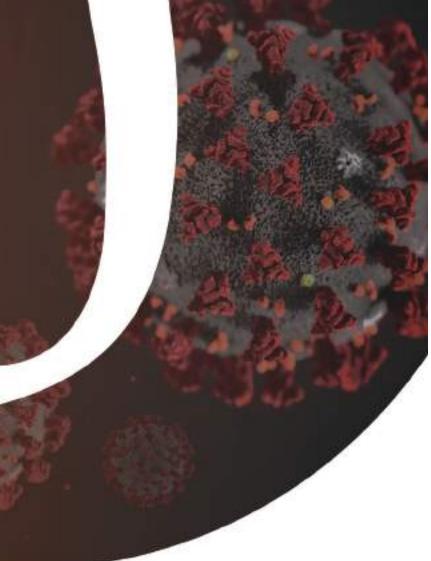


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## **BEYOND CONVENIENCE MmaxSure<sup>™</sup> EZ SARS-CoV-2 Detection Kit**





#### A Fast, Efficient and Simple kit with high accuracy that's all you need

M monitor introduces a real advance in point-of-care molecular diagnostics of coronavirus that is radically faster, cheaper, and more reliable than the conventional methods.



## coronavirus COVID-19

## Within 🙆 mins, Immediate diagnosis on site

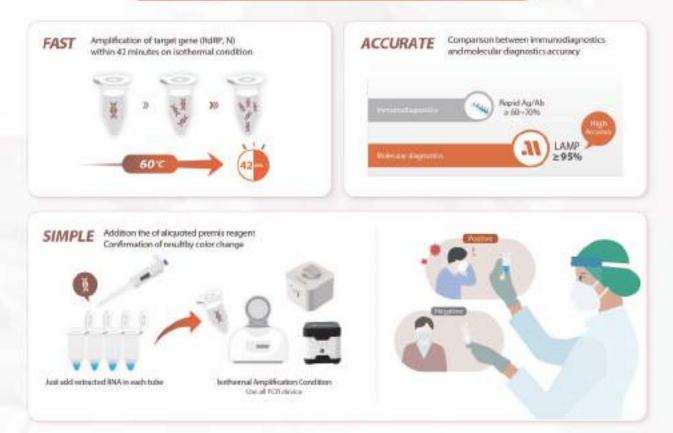
#### Why choosing <u>M monitor ?</u> Why MmaxSure<sup>™</sup> EZ SARS-CoV-2 Detection Kit ?



MmaxSure<sup>™</sup> EZ SARS-CoV-2 Detection Kit is designed for the detection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection from extracted RNA of clinical specimens of human nasopharyngeal swab and oropharyngeal swab. Based on RT-LAMP (Reverse Transcription Loop-mediated Isothernal Amplification) technology, making this product fast and accurate.

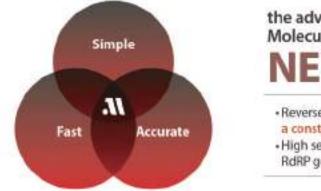
- The amplification of the target gene is possible at one temperatur, and the results can be confirmed within a short time.
- Since only RNA is added to the pre-mixed reagent, it is simple. It can be diagnosed by the color change and is suitable for POCT (Point-of-Care testing).

#### Soluciones en Lugar-De-Atención Fáciles de Usar



With fast and accurate diagnosis, anyone can easily diagnose

#### Actualize NEW types of MDx



## How to detect to the current coronavirus variants?

Detection of the SARS-CoV-2 variant including Alpha(B.1.1.7), Beta(B.1.351), Delta(B.1.617.2), Gamma(P.1), and Omicron(B.1.1.529)

Genetic variants of SARS-CoV-2 have been emerging around the world. Our kit detects SARS-CoV-2 infection even if there are various recently described genetic variants.

#### Specification

Expiration date | 12 months (from date of manufacture) Storage condition | -25°C ~-15°C (Frozen storage)



Workflow

Sample collection

Add the UTM tube solution



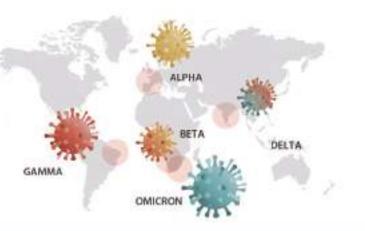
Use a swab to collect nasopharyngeal A samples for the UTM tube

Add the UTM tube solution to the premix tube without any other preparation

#### the advantages of both Molecular diagnostics & Immunodiagnostics **NEW PARADIGM**

 Reverse transcription and amplification take place under a constant temperature.

 High sensitivity and specificity: Detection up to 5 copies/ d of RdRP gene & N gene



D P	remb	x4st	rip tub	e		25 tests
ET	10.0	110	HT.	СП	RdRP gene	2018
R	CN	IPC	NCC	CN.	Ngene	2016
1		11		10%	Internal Positive Control	2018
1	9	8	1	NCC	Negative Color Control	20,1
P	ositiv	le Co	ntrol			7514
D	istille	d wa	ster			14

\*The kit has included the IPC (Internal positive control, endogenous human Relase P mRNA) \*IPC detection is not an essential condition in the positive result of the specimen.



#### Ship 4

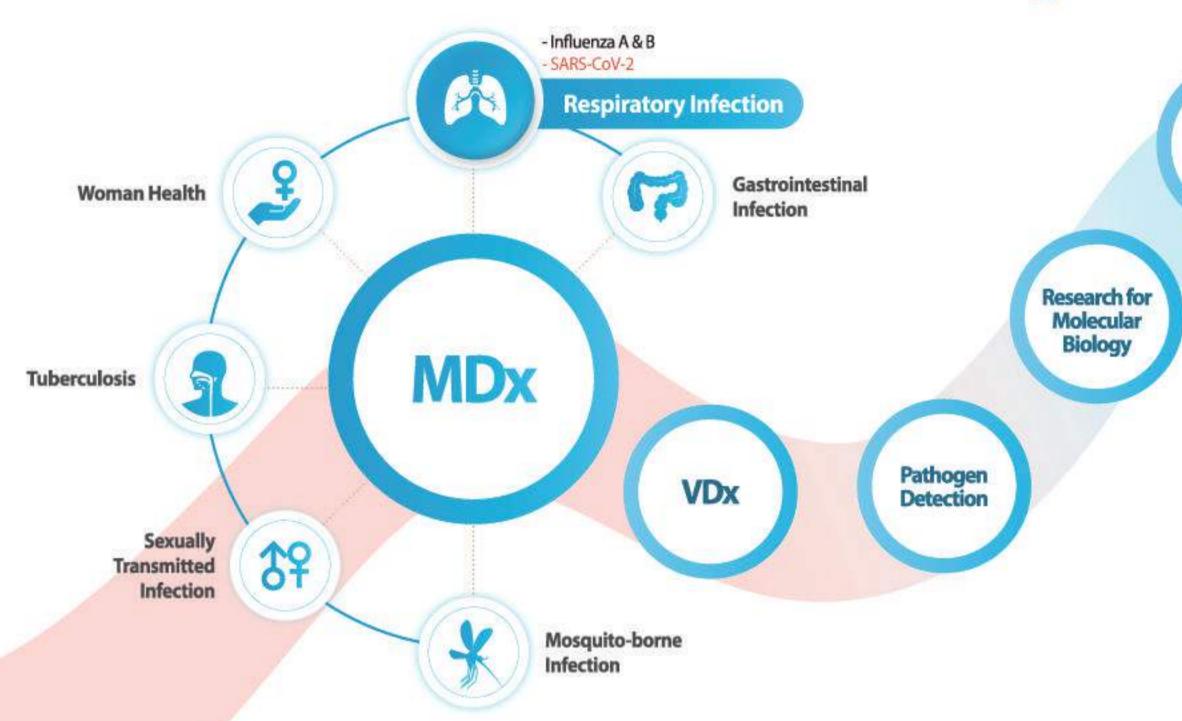
Confirmation of result with naked eyes

Res	eit
CR CN IPC NCC	CR CN IPC NCC
Positive	Negative

Amplified targets can be confirmed by color change

"Negative result shows colorless, while positive shows cyae.

## **M monitor** stands in all areas of **Molecular Diagnostics**.



## **ORDERING INFORMATION**

Category	Target	Cat. No.	Product	Specimen	Volume
	Flu A, Flu B	52201	MmaxSure™Influenza A&B		
	Flu A, Flu B, Flu A-H1pdm, Flu A-H3	52219	MmaxSure <sup>™</sup> Respiratory Panel 1		
1XX	MPV, RSV A, RSV B, HRV, HEV, AdV	52220	MmaxSure <sup>™</sup> Respiratory Panel 2	Nasopharyngeal	25 tests
MmaxSure	PIV 1, PIV2, PIV 3, PIV 4	52221	MmaxSure <sup>™</sup> Respiratory Panel 3	swab	
	HBoV, CoV NL63, CoV 229E, CoV OC43, ECHO	52222	MmaxSure <sup>™</sup> Respiratory Panel 4		

» Please contact us for bulk order.

## **EXTRACTION REGENT** (Optional)

#### LG AdvanSure<sup>™</sup> E3 System

- Cat. No.
  - YETS0001EG Automated nucleic acid extraction
- Application
- Specification 340 \* 420 \* 345 (mm)
- Number of Up to 48
   Sample



## **COMPATIBLE INSTRUMENT**

#### DuxCycler

- · Cat. No. 82301
- Nucleic acid amplification Application
- Specification 150 \* 150 \* 150 (mm)



- MXM-L1
- . Cat. No.
- Application

- » We recommend two kinds of isothermal amplifiers above, however, conventional PCR or real-time PCR instruments are also available if they can be set-up to constant temperature for isothermal reactions.



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**Nucleic Acid** Extraction

Instrument

#### www.mmonitor.net

#### MmaxSure<sup>™</sup> Influenza A&B MmaxSure<sup>™</sup> Respiratory Panel Assay

- MmaxSure™ Respiratory Panel
- MmaxSure™ Respiratory Panel 2
- MmaxSure™ Respiratory Panel 3
- MmaxSure™ Respiratory Panel 4

82302 Nucleic acid amplification Specification 130 \* 130 \* 90 (mm) 8 wells(0.2ml tube)/2 wells(1.5ml tube)



## **BEYOND CONVENIENCE Respiratory Infection Diagnosis Kit**

M monitor introduces a real advance in point-of-care molecular diagnostics of respiratory infection that is radically faster, cheaper, and more reliable than conventional methods.





**A Total Diagnosis Solution for Respiratory track Infection** 



# Actualize NEW types of MDx

## **ALL DIAGNOSIS START** AT **1** PLATFORM TECHNOLOGY.

Respiratory infections caused by dozens of respiratory viral and bacterial pathogens commonly occur in symptomatic adult and pediatric patients. In particular, influenza viruses occur all over the world and affect millions of people every year for all ages. Influenza virus is mainly transmitted by the respiratory secretions of an infected person. Especially in older people, secondary bacterial pneumonia is a complication of influenza infection. Influenza is associated with considerable economic burden arising from health-care costs and general social disruption. So, early detection of causative virus or bacteria is essential in many reasons. In order to guide the effective state of treatment and to control the spread of the disease, clinicians need to know which viral or bacterial pathogens have been infected, even in the early stages of infection. However, traditional methods are very slow, inconclusive and inaccurate, most clinicians have no specific treatment other than empirically prescribing antibiotics without any information of the infectious pathogens.

MmaxSure<sup>™</sup> Influenza A&B and respiratory panels based on isothermal amplification technology help to ensure the best possible treatment to provides a fast and accurate diagnosis, but also identifies the types of pathogens infected.



## A REAL POINT-OF-CARE TECHNOLOGIES FOR MDx

The key to point-of-care (POC) diagnostics is the ability to quickly amplify the target and simple nucleic acid extraction in a single operation.

## Experience molecular diagnostics with high accuracy in your field as well as laboratory through direct nucleic acid extraction and isothermal amplification kits!



Individua



No need for lab



Use of cheap, small and battery-controlled

		Respirat	tory Panel Assay	
MmaxSure <sup>™</sup> Influenza A&B	Panel 1 4 targets	Panel 2 6 targets	Panel 3 4 targets	Panel 4 5 targets
	Flu	MPV/RSV/HRV/HEV/AdV	PIV	HBoV/CoV/ECHO
Influenza A virus Influenza B virus	• Influenza A virus • Influenza B virus • Influenza A-H1pdm • Influenza A-H3	<ul> <li>Metapneumovirus</li> <li>Respiratory syncytial virus A</li> <li>Respiratory syncytial virus B</li> <li>Rhinovirus</li> <li>Enterovirus D68</li> <li>Adenovirus</li> </ul>	<ul> <li>Parainfluenza virus 1</li> <li>Parainfluenza virus 2</li> <li>Parainfluenza virus 3</li> <li>Parainfluenza virus 4</li> </ul>	<ul> <li>Bocavirus</li> <li>Coronavirus NL63</li> <li>Coronavirus 229E</li> <li>Coronavirus OC43</li> <li>Echovirus</li> </ul>

Category	Immunochemical method	PCR
Accuracy	+	+++
Sensitivity	+	++
<b>Required time</b>	+++	+
Extraction method	+++ (Simple)	+ (Complicated)
Result checking method	+++ (Simple)	+ (Complicated)
Equipment dependency	N/A	(Restricted)

M	monitor
	+++
	+++
6	+++
	+++
(	(Simple)
1	+++
(	(Simple)
	+++
(No d	lependency)



Catego	ory	Target	Cat. No.	Product
N/	<b>M</b> maxSure	Malaria ( <i>Pf, Pv</i> )	52504	MmaxSure <sup>™</sup> Malaria Detection Kit ( <i>Pf/Pv</i> )
MmaxS		Dengue (DENV-1, 2, 3, 4)	52209	MmaxSure™ Dengue Test Kit

» Please contact us for bulk order.

## **COMPATIBLE INSTRUMENT**

#### DuxCycler

- Cat. No. 82301
- Nucleic acid amplification Application
- Specification 150 \* 150 \* 150 (mm) 25 wells / 0.2 ml tube
- Control up to 8 units simultaneously with single laptop





- MXM-L1
- 82302 • Cat. No.
- Application
- Nucleic acid amplification • Specification 130 \* 130 \* 90 (mm) 8 wells / 0.2ml tube 2 wells / 1.5ml tube
- Bluetoot connection with smartphone APP
- Control up to 5 units simultaneously
- Use for POCT



» We recommend two kinds of isothermal amplifiers above, however, conventional PCR or real-time PCR instruments are also available if they can be set-up to constant temperature for isothermal reactions



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M monitor introduces a real advance in point-of-care molecular diagnostics of mosquito-borne diseases that is radically faster, cheaper, and more reliable than the conventional methods.



# **BEYOND CONVENIENCE Mosquito-borne Infection Diagnosis Kit**

## A Fast, Cheap, and Reliable test for mosquito-borne diseases



# Actualize NEW types of MDX

Current diagnostic reagents based on antigen-antibody reaction show a positive reaction (infected) in people who have been cured of mosquito-borne diseases or a negative response in people who have mosquito-borne disease.

- WHO (World Health Organization)

## WHY IS EARLY DETECTION IMPORTANT?

Symptoms of mosquito-borne diseases do not appear immediately, But symptoms such as fever, headache, and body aches are similar as a cold. Therefore, it is very important to accurately and quickly identify the virus that causes the disease.



#### Mosquito-borne Infection Diagnosis Kit



## **ACCURATE**

More than 95% accuracy based on molecular diagnositc method.

## FAST

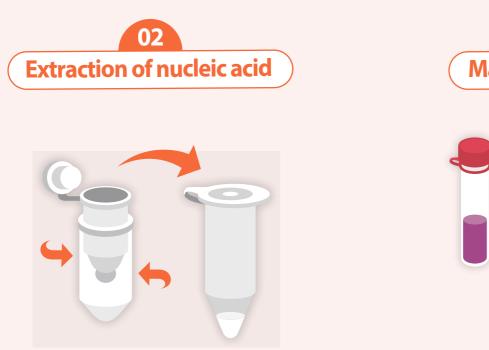
Diagnosis within 1 hour by simplified nucleic acid extraction system and isothermal amplification technology.



## **DIAGNOSIS WORK FLOW**



Collect sample in sterile tubes treated EDTA as the anticoagulant or in serum separator tubes.



Simple and easy direct extraction methods are available as well as all kinds of extraction method such as using column and bead type.



Make the LAMP mixture as advised in the manual and aliquot them in the reaction tube. Then add the extracted nucleic acid to the dispensed mixture.

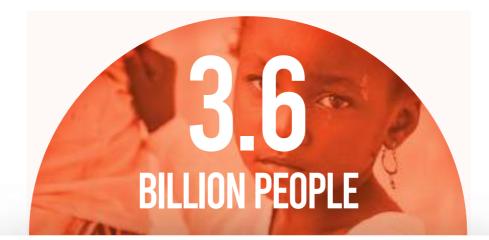




A wide range of thermocycler compatibility such as conventional or real-time machines.

## SIMPLE

The results are simply **confirmed** by color change, and no need to additional experiments or devices.



More than half of the world's population is at risk of mosquito-borne diseases.

## **ADVANTAGE**

To prevent increased fatality rate from false result, we provide a variety of gene detection kits that can check the safety of threats form mosquito-borne viral diseases.

All detection kits are based on new technology by combining with the advantages of simplicity in Immune-chemical diagnosis and those of accuracy in molecular diagnosis.

Req **Result ch** 

Equipm

## **SPECIFICATION**

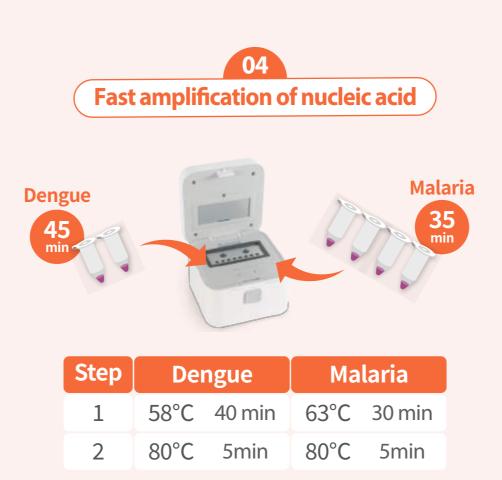
## MmaxSure<sup>™</sup> Malaria Detection Kit (*Pf/Pv*)

Contents					
2X PTB Master Mix	625 µl				
Detection primer (Pf)	100 µl				
Detection primer (Pv)	100 µl				
Control template	20 µl				
Control primer	20 µl				
Distrlled water	1000 µl				

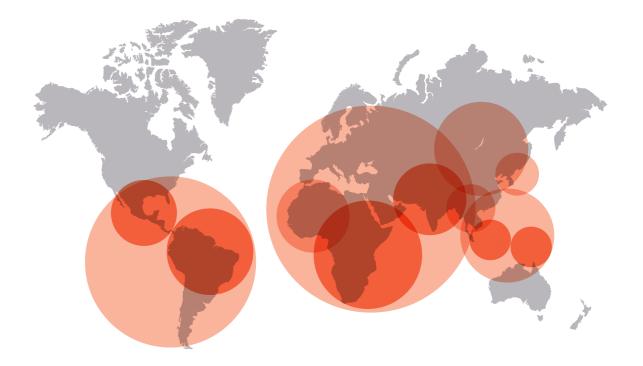


**Expiration date** 12 months (from date of manufacture)

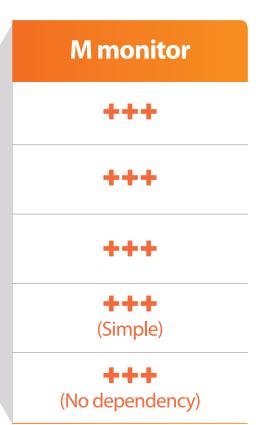
03 Make mixture & Add nucleic acid



Only 30~40 minutes takes to amplify nucleic acid under isothermal conditions.



Category	Immunochemical method	PCR
Accuracy	+	+++
Sensitivity	+	++
quired time	+++	+
hecking method	+++ (Simple)	+ (Complicated)
ent dependency	N/A	- (Restricted)



## **MmaxSure<sup>™</sup> Dengue Test Kit**

Contents					
2X Reaction Buffer	625 µl				
Enzyme mix	50 µl				
Detection primer (DG)	100 µl				
Control template	20 µl				
Control primer (RNA)	20 µl				
<b>Distilled water</b>	1000 µl				



**Storage condition** | -25°C ~ -15°C (Frozen storage)



Amplified targets can be confirmed by identifying color change of solution without using any additional devices. When the specific target is amplified, the color of the solution shows a blue color.