

# VIASURE

Real Time PCR Detection Kits

**Lyophilised kits**

One assay. Multiple pathogens detection



CerTest  
BIOTEC

# Molecular Diagnostics

**VIASURE® Real Time PCR Detection Kits** are designed for the diagnosis of infectious diseases caused by different pathogens in human samples.

This product range is based on 5' nuclease chemistry. This technology utilizes two primers and a hydrolysis probe and exploits the exonuclease activity of Taq DNA polymerase.

During the amplification, the increase in the fluorescent signal is proportional to the quantity of target sequence present in the sample and could be measured on a wide range of Real Time PCR platforms.

**VIASURE® Real Time PCR Detection Kit** contains in each well all the necessary components for Real Time PCR assay in a stabilized format, which allows the shipment at room temperature.

Monoplex, Multiplex and Panel lyophilised assays providing maximum flexibility and compatibility with leading open system thermal cyclers.



The **Real Time PCR** technique aims to obtain a large number of copies of a specific DNA fragment from a minimum amount.



## Work Flow



1 Add 15 µl of rehydration buffer into each well (\*).

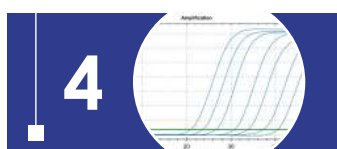
(\*): It is recommended to include one positive and negative control in each run.



2 Add 5 µl of: DNA/RNA sample // or Positive control // or Negative control.



3 Load the strips into the thermocycler and run the specified protocol.



4 Interpretate results.

## ■ Gastrointestinal infections

	Type	Ref.	Description
■ <b>Multiplex</b>	Virus	NOR	Norovirus GI+GII <sup>(1)</sup>
	Bacteria	SCY	<i>Salmonella, Campylobacter &amp; Yersinia enterocolitica</i>
		SCS	<i>Salmonella, Campylobacter &amp; Shigella/EIEC</i>
		CLJ	<i>Campylobacter coli, C. lari &amp; C. jejuni</i> <sup>(1)</sup>
		AEY	<i>Aeromonas spp + Yersinia enterocolitica</i>
		ESE	<i>E. coli</i> ETEC + EIEC <sup>(1)</sup>
		EEE	<i>E. coli</i> EHEC, EPEC & EIEC <sup>(1)</sup>
		ECT	<i>E. coli</i> typing (2 wells) <sup>(1)</sup> : ( <i>E. coli</i> ETEC + EIEC) + ( <i>E. coli</i> EHEC, EPEC & EIEC)
		CLA	<i>H. pylori</i> + Clarithromycin resistance
		CDA	<i>Clostridium difficile</i> toxins A+B
	Parasites	KGE	<i>Cryptosporidium, Giardia &amp; E. histolytica</i> <sup>(1)</sup>
		BLD	<i>Blastocystis hominis + Dientamoeba fragilis</i> <sup>(1)</sup>

**Coming soon:**

- Vibrio differentiation: *V. cholerae*, *V. parahaemolyticus* & *V. vulnificus*

	Type	Ref.	Description
■ <b>Monoplex</b>	Virus	ADV	Adenovirus
		ATV	Astrovirus
		NOG	Norovirus GI
		NOP	Norovirus GII
		RTV	Rotavirus
		SAV	Sapovirus
		Bacteria	CAM
	CDS		<i>Clostridium difficile</i> <sup>(1)</sup>
	CTB		<i>Clostridium difficile</i> toxB <sup>(1)</sup>
	CIA		<i>Clostridium difficile</i> toxins A/B <sup>(1)</sup>
	PYR		<i>Helicobacter pylori</i> <sup>(1)</sup>
	SAM		<i>Salmonella</i>
	SHY		<i>Shigella/EIEC (Enteroinvasive Escherichia coli)</i>
	YER		<i>Yersinia enterocolitica</i>
	Parasites	KRY	<i>Cryptosporidium</i>
		GIA	<i>Giardia lamblia</i>
		ETH	<i>Entamoeba histolytica</i>
		ETD	<i>Entamoeba dispar</i>
		DIE	<i>Dientamoeba fragilis</i>

<sup>(1)</sup> Kit available with extraction control; <sup>(2)</sup> Research Use Only

## ■ Respiratory infections

	Type	Ref.	Description	
■ Multiplex	Virus	IAB	Flu A + Flu B	
		ABR	Flu A, Flu B & RSV <sup>(1)</sup>	
		RSV	RSV A + B <sup>(1)</sup>	
		H13	Flu Typing I (H1N1 & H3N2)	
		HXN	Flu Typing II (H1N1, H5N1, H3N2 & H7N9)	
		RPA	Respiratory Viral Panel I (2 wells) <sup>(1)</sup> : (Flu A, Flu B & RSV) + (H1N1, H5N1, H3N2 & H7N9)	
		PIZ	Parainfluenza (1, 3 & 2, 4) (2 wells)	
		AMB	Adenovirus, Metapneumovirus & Bocavirus	
		RHE	Rhinovirus + Enterovirus	
		MER	MERS Coronavirus (2 wells)	
		COR	Coronavirus (229E, NL63, OC43 & HKU1)	
		Bacteria	BDT	<i>Bordetella</i> ( <i>B. pertussis</i> , <i>B. parapertussis</i> & <i>B. holmesii</i> ) <sup>(1)</sup>
			CML	<i>C. pneumoniae</i> , <i>M. pneumoniae</i> & <i>L. pneumophila</i> <sup>(1)</sup> <sup>(2)</sup>
			HSM	<i>H. influenzae</i> , <i>S. pneumoniae</i> & <i>M. catarrhalis</i> <sup>(1)</sup>

**Coming soon:**

- *M. tuberculosis* complex + non-tuberculosis mycobacteria <sup>(1)</sup>

	Type	Ref.	Description	
■ Monoplex	Virus	BVS	Bocavirus	
		MPV	Human metapneumovirus	
		YIA	Influenza A	
		HNV	Influenza A(H1N1)pdm09 <sup>(1)</sup>	
		YIB	Influenza B	
		PIA	Parainfluenza 1	
		PIB	Parainfluenza 2	
		PIC	Parainfluenza 3	
		PID	Parainfluenza 4	
		RSA	RSV A	
		RSB	RSV B	
		Bacteria	LGN	<i>Legionella pneumophila</i> <sup>(1)</sup>
			MTC	<i>M. tuberculosis</i> complex <sup>(1)</sup>
		Fungi	JIR	<i>Pneumocystis jirovecii</i> ( <i>q</i> ) <sup>(1)</sup>

<sup>(1)</sup> Kit available with extraction control; <sup>(2)</sup> Research Use Only; (*q*) Quantitative

## ■ Vector-Borne transmission

### ■ Multiplex

Ref.	Description
ZDC	Zika, Dengue & Chikungunya Virus <sup>(1)</sup>
DES	Dengue Serotyping (Dengue 1, 4 & 2, 3) (2 wells)
TBD	Tick Borne Diseases (3 wells) <sup>(1)</sup> : ( <i>Borrelia</i> , <i>Anaplasma</i> & <i>Coxiella</i> ) + ( <i>Rickettsia</i> , <i>Babesia</i> & <i>Ehrlichia</i> ) + (TBEV)
BAC	<i>Borrelia</i> , <i>Anaplasma</i> & <i>Coxiella</i> <sup>(1)</sup>

### ■ Monoplex

#### Type

Virus

Ref.	Description
ZIK	Zika Virus
DEN	Dengue Virus
CHI	Chikungunya Virus
WNV	West Nile Virus
FEV	Yellow Fever <sup>(1)</sup>
MYV	Mayaro Virus <sup>(1)</sup>
CCV	Crimean-Congo Haemorrhagic Fever
JEV	Japanese Encephalitis Virus

#### Parasites

CHA	<i>Trypanosoma cruzi</i> (Chagas)
MAD	Malaria differentiation (2 wells): ( <i>P. malariae</i> , <i>P. knowlesi</i> & <i>P. ovale</i> ) + ( <i>P. falciparum</i> , <i>P. vivax</i> )
MAL	Malaria ( <i>q</i> ) <sup>(1)</sup>

#### Coming soon:

- Oropouche Virus
- Leishmania

## ■ Antimicrobial resistance

### ■ Multiplex

Ref.	Description
VAN	Vancomycin resistance
CLA	<i>H. pylori</i> + Clarithromycin resistance
MSA	Methicillin-resistant <i>Staphylococcus aureus</i> <sup>(1)</sup>

#### Coming soon:

- Carbapenemase-producing Enterobacteriaceae (2 wells):  
(NDM+VIM) + (OXA, KPC & IMP)

<sup>(1)</sup> Kit available with extraction control; <sup>(2)</sup> Research Use Only; (*q*) Quantitative

## Sexual health

### Multiplex

Ref.	Description
STD	Sexually transmitted diseases (2 wells) <sup>(1)</sup> : ( <i>N. gonorrhoeae</i> , <i>C. trachomatis</i> & <i>M. genitalum</i> ) + ( <i>T. vaginalis</i> , <i>U. urealyticum</i> , <i>U. parvum</i> & <i>M. hominis</i> )
HHT	Herpes virus 1, Herpes virus 2 & <i>Treponema pallidum</i>
HCT	<i>H. ducreyi</i> + <i>C. trachomatis</i> (LGV) <sup>(1)</sup> <sup>(2)</sup>
CGT	<i>C. albicans</i> , <i>G. vaginalis</i> & <i>T. vaginalis</i>
HPV	Human Papilloma Virus 16 + 18 <sup>(1)</sup>

### Monoplex

Ref.	Description
GBS	<i>Streptococcus B</i>
TPA	<i>Treponema pallidum</i> <sup>(1)</sup>

## Transplant, Meningitis & Others

### Multiplex

Transplant

Ref.	Description
BJV	BK + JC Virus
HHZ	Herpes Virus 1, Herpes Virus 2 & Varicella Zoster Virus <sup>(1)</sup>
HHV	Human Herpes Virus 6, 7 & 8

Meningitis

HNS	<i>H. influenzae</i> , <i>N. meningitidis</i> & <i>S. pneumoniae</i> <sup>(1)</sup>
SLE	<i>S. agalactiae</i> , <i>L. monocytogenes</i> & <i>E. coli</i>

#### Coming soon:

- Mumps, Enterovirus & Parechovirus



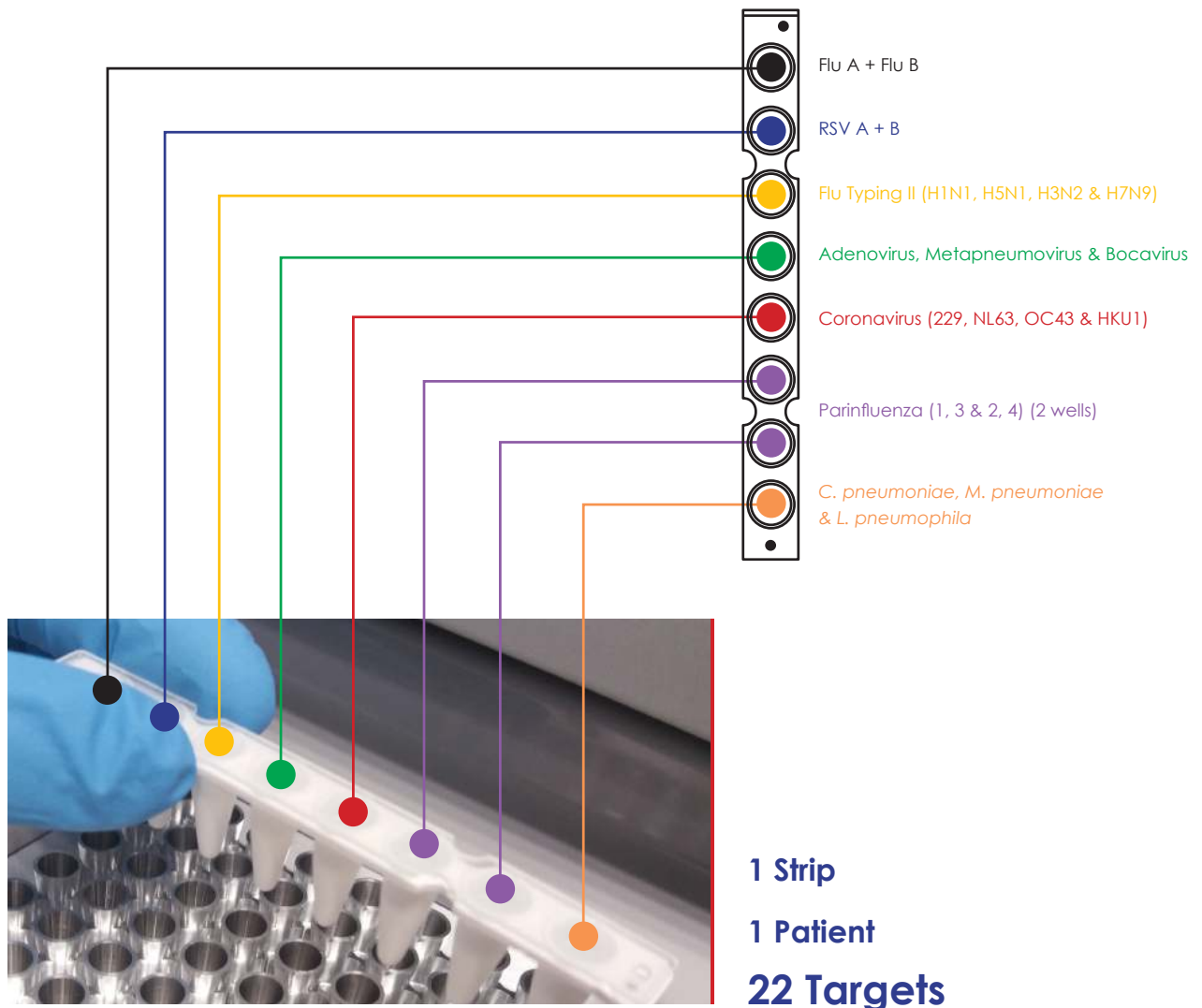
<sup>(1)</sup> Kit available with extraction control; <sup>(2)</sup> Research Use Only

# VIASURE Panels

Real Time PCR multiplexing panel kits detecting simultaneously viruses, bacteria or parasites.

Simultaneous detection of multiple targets in a broad range of multiplexing diagnostic panels. Flexible choice of target pathogen based for effective patient care and cost-effectiveness.

**Each panel is dedicated to a specific area of pathology.**

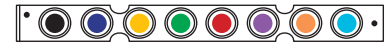


Example for respiratory panel disposition.



## ■ Gastrointestinal panel I <sup>(1)</sup> Ref. GP01

- *Salmonella, Campylobacter & Y. enterocolitica*
- *Shigella/EIEC*
- *Cryptosporidium, Giardia & E. histolytica*
- Norovirus GI + GII
- Rotavirus
- Adenovirus
- Astrovirus
- Sapovirus



Patient #1

## ■ Gastrointestinal panel II <sup>(1)</sup> Ref. GP02

- *Salmonella, Campylobacter & Shigella/EIEC*
- *Aeromonas spp. + Yersinia enterocolitica*
- *E. coli* typing (2 tubes)
- *Clostridium difficile*
- *Clostridium difficile toxB*
- *Cryptosporidium, Giardia & E. histolytica*
- *Blastocystis hominis + Dientamoeba fragilis*



Patient #1

## ■ Gastrointestinal panel III <sup>(1)</sup> Ref. GP03

- *Salmonella, Campylobacter & Shigella/EIEC*
- *Aeromonas spp. + Yersinia enterocolitica*
- *E. coli* ETEC + EIEC
- *E. coli* EHEC, EPEC & EIEC



Patient #1

Patient #2

## ■ Gastrointestinal panel IV <sup>(1)</sup> Ref. GP04

- *Clostridium difficile* toxins A + B
- *Salmonella, Campylobacter & Yersinia enterocolitica*
- *Campylobacter coli, C. lari & C. jejuni*
- *E. coli* EHEC, EPEC & EIEC



Patient #1

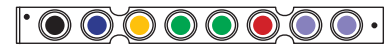
Patient #2

<sup>(1)</sup> Kit available with extraction control; <sup>(2)</sup> Research Use Only



## ■ Respiratory panel I <sup>(1)</sup> Ref. RP01

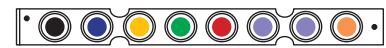
- Flu A, flu B & RSV
- Rhinovirus + Enterovirus
- Adenovirus, Metapneumovirus & Bocavirus
- MERS Coronavirus (2 tubes)
- Coronavirus (229, NL63, OC43 & HKU1)
- Parainfluenza (1, 3 & 2, 4) (2 tubes)



Patient #1

## ■ Respiratory panel II <sup>(1)</sup> <sup>(2)</sup> Ref. RP02

- Flu A + Flu B
- RSV A + B
- Flu Typing II (H1N1, H5N1, H3N2 & H7N9)
- Adenovirus, Metapneumovirus & Bocavirus
- Coronavirus (229, NL63, OC43 & HKU1)
- Parainfluenza (1, 3 & 2, 4) (2 tubes)
- *C. pneumoniae*, *M. pneumoniae* & *L. pneumophila*



Patient #1

## ■ Respiratory panel III <sup>(1)</sup> <sup>(2)</sup> Ref. RP03

- Flu A, Flu B & RSV
- Parainfluenza (1, 3 & 2, 4) (2 tubes)
- Adenovirus, Metapneumovirus & Bocavirus
- Rhinovirus + Enterovirus
- Coronavirus (229, NL63, OC43 & HKU1)
- *C. pneumoniae*, *M. pneumoniae* & *L. pneumophila*
- *H. influenzae*, *S.pneumoniae* & *M. catarrhalis*



Patient #1

## ■ Respiratory panel IV <sup>(1)</sup> Ref. RP04

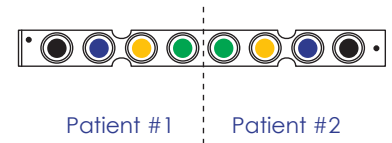
- Flu A+B
- Influenza H1N1
- RSV A+B
- Parainfluenza (1, 3 & 2, 4) (2 tubes)
- Adenovirus, Metapneumovirus & Bocavirus
- Rinovirus + Enterovirus
- Coronavirus (229, NL63, OC63 & HKU1)



Patient #1

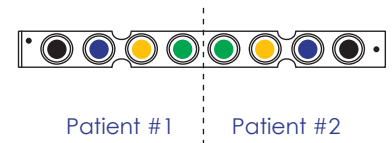
## Sexual health panel I <sup>(1)</sup> <sup>(2)</sup> Ref. SP01

- *N. gonorrhoeae*, *C. trachomatis* & *M. genitalum*
- *T. vaginalis*, *U. urealyticum*, *U. parvum* & *M. hominis*
- Herpes virus 1, Herpes virus 2 & *Treponema pallidum*
- *C. albicans*, *G. vaginalis* & *T. vaginalis*

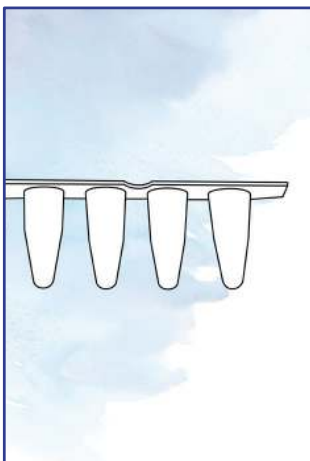


## Tropical panel I <sup>(1)</sup> Ref. TP01

- Zika, Dengue & Chikungunya Virus
- West Nile
- Yellow Fever
- Mayaro Virus

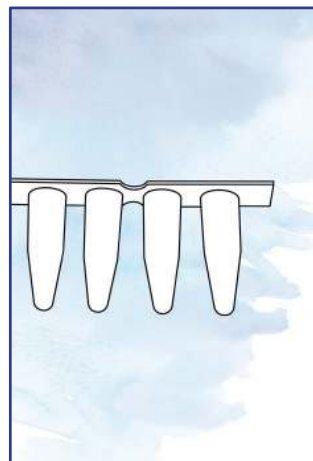


## Available formats



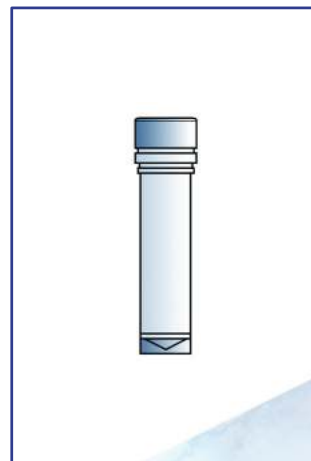
### Low profile Well

Strip or plate available.



### High profile Well

Strip or plate available.



### 2ml Tube

Only for Multiplex and Monoplex kits.



### Rotor-Gene Tube

Only for Multiplex and Monoplex kits.

<sup>(1)</sup> Kit available with extraction control; <sup>(2)</sup> Research Use Only



**VIASURE** kits offer maximum flexibility and compatibility with open system thermal cyclers.

## Compatibilities

Low Profile Block Thermocyclers	
Manufacturer	Model
Agilent Technologies	AriaMx / AriaDx
Applied Biosystems	7500 Fast <sup>(1)</sup>
Applied Biosystems	7500 Fast Dx <sup>(1)</sup>
Applied Biosystems	QuantStudio™ 3 Fast <sup>(2)</sup>
Applied Biosystems	QuantStudio™ 5 Fast
Applied Biosystems	QuantStudio™ 6 Flex 96-well Fast
Applied Biosystems	QuantStudio™ 7 Flex 96-well Fast
Applied Biosystems	QuantStudio™ 12K Flex 96-well Fast
Applied Biosystems	StepOne Plus™ <sup>(2)</sup>
Applied Biosystems	StepOne™ <sup>(2)</sup>
Applied Biosystems	ViiA™ 7 Fast
Bioneer	Exicycler™ 96
Bio-Rad	CFX96™ / CFX96™ IVD
Bio-Rad	Mini Opticon™
Roche	LightCycler® 480
Roche	LightCycler® 96
Roche	Cobas z480 Analyzer

Special Formats	
Manufacturer	Model
Qiagen	Rotor-Gene® Q
Cepheid	Smartcycler® <sup>(3)</sup>
BMS	Mic qPCR Cycler

High Profile Block Thermocyclers	
Manufacturer	Model
Abbott	Abbott m2000
Applied Biosystems	7300 <sup>(2)</sup>
Applied Biosystems	7500
Applied Biosystems	7900 HT
Applied Biosystems	ABI PRISM 7000
Applied Biosystems	ABI PRISM 7700
Applied Biosystems	QuantStudio™ 3 <sup>(2)</sup>
Applied Biosystems	QuantStudio™ 5
Applied Biosystems	QuantStudio™ 6 Flex 96-well
Applied Biosystems	QuantStudio™ 7 Flex 96-well
Applied Biosystems	QuantStudio™ 12K Flex 96-well
Applied Biosystems	ViiA™ 7
Analytik Jena Biometra	TOptical
Analytik Jena Biometra	qTOWER 2.0
Bioneer	Exicycler™ 96
Bio-Rad	CFX96™ Deep Well / CFX96™ Deep Well IVD
Bio-Rad	iCycler iQ™
Bio-Rad	iCycler iQ™ 5
Bio-Rad	MyiQ™
Bio-Rad	MyiQ™ 2
DNA-Technology	DPrime
DNA-Technology	DTiite
Eppendorf	Mastercycler™ ep <i>realplex</i>
Stratagene / Agilent Technologies	Mx3000P™
Stratagene / Agilent Technologies	Mx3005P™
VIASURE	VIASURE 48
VIASURE	VIASURE 96

<sup>(1)</sup> Select Ramp Speed "Standard".

<sup>(2)</sup> No detection in Cy5 channel.

<sup>(3)</sup> The product should be reconstituted following the appropriate procedure and transferred into specific SmartCyclers® tubes.

Compatibilities for monoplex VIASURE Kits. For multiplex kits compatibility, see instructions for use.



## Benefits & Advantages



"Ready & Easy-to-use" kits.  
**Lyophilised product**



**Transport and storage at room temperature**



**Shelf-life: 24 months**



**Create your own panel.**  
Same thermal protocol



From 1 **up to 96 samples** per assay



High sensibility, specificity and reproducibility



Validated according to **ISO 13485**  
and **CE marked**

*The Real Time Polymerase Chain Reaction has been turned into one of the most powerful in vitro diagnostic tools for the detection and quantification of DNA or RNA.*

# VIASURE

Real Time PCR Detection Kits

**CerTest**  
BIOTEC

*One step ahead*

**CerTest Biotec, S.L.**

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VIASURE/GEN-1219EN