

CerTest
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VIASURE

Real Time PCR Detection Kits

Lyophilised kits

One assay.
Multiple pathogens detection



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 and Multiplex kits provide maximum flexibility and compatibility with leading open system thermal cyclers.



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



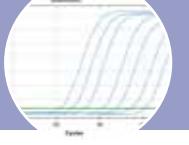
Add 5 µL of: DNA/RNA sample // or Positive control // or Negative control.

3



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

4



Interpretate results.



► Gastrointestinal infections

MULTIPLEX

| Reference | Description |
|-----------|-------------------------------------------------------------------------------------------|
| NOR | Norovirus GI + GII (¹) |
| SCY | Salmonella, Campylobacter & Yersinia enterocolitica |
| SCS | Salmonella, Campylobacter & Shigella/EIEC |
| AEY | Aeromonas spp + Yersinia enterocolitica |
| ESE | <i>E. coli</i> ETEC + EIEC |
| EEE | <i>E. coli</i> EHEC, EPEC & EIEC |
| ECT | <i>E. coli</i> typing (<i>E. coli</i> ETEC + EIEC) + (<i>E. coli</i> EHEC, EPEC & EIEC) |
| CLA | <i>H. pylori</i> + Clarithromycin resistance |
| KGE | <i>Cryptosporidium</i> , <i>Giardia</i> & <i>E. histolytica</i> (¹) |
| BLD | <i>Blastocystis hominis</i> + <i>Dientamoeba fragilis</i> |
| CLJ | <i>Campylobacter coli</i> , <i>C. lari</i> & <i>C. jejuni</i> |

Coming soon:

- Toxin B, Binary toxin & Hypervirulent strains (027)

MONOPLEX

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

(¹) Kit available with extraction control; (²) Research Use Only



► Respiratory infections

MULTIPLEX

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

MONOPLEX

| Reference | Type | Description |
|-----------|----------|----------------------------------------------|
| BVS | | Bocavirus |
| MPV | | Human Metapneumovirus |
| YIA | | Influenza A |
| HNV | | Influenza A(H1N1)pdm09 |
| YIB | | Influenza B |
| PIA | Virus | Parainfluenza 1 |
| PIB | | Parainfluenza 2 |
| PIC | | Parainfluenza 3 |
| PID | | Parainfluenza 4 |
| RSA | | RSV A |
| RSB | | RSV B |
| LGN | Bacteria | <i>Legionella pneumophila</i> ⁽¹⁾ |
| JIR | Fungi | <i>Pneumocystis jirovecii</i> ⁽¹⁾ |



⁽¹⁾ Kit available with extraction control; ⁽²⁾ Research Use Only



► Vector-Borne transmission

MULTIPLEX

| Reference | Description |
|-----------|-------------------------------------------------|
| ZDC | Zika, Dengue & Chikungunya Virus ⁽¹⁾ |
| DES | Dengue Serotyping (Dengue 1, 4 & 2, 3) |

Tick Borne Diseases

| | |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TBD | TBEV + Rickettsia spp., <i>B. microti/divergens</i> & <i>E. chaffeensis/muris</i> + <i>B. burgdorferi</i> sl, <i>A. phagocitophylum</i> & <i>C. burnetii</i> ⁽¹⁾ |
| BAC | <i>B. burgdorferi</i> sl, <i>A. phagocitophylum</i> & <i>C. burnetii</i> ⁽¹⁾ |

MONOPLEX

| Reference | Type | Description |
|-----------|----------|-----------------------------------|
| ZIK | | Zika Virus |
| DEN | | Dengue Virus |
| CHI | | Chikungunya Virus |
| WNV | Virus | West Nile Virus |
| FEV | | Yellow Fever |
| MYV | | Mayaro Virus |
| CCV | | Crimean-Congo Haemorrhagic Fever |
| JEV | | Japanese Encephalitis Virus |
| CHA | Parasite | <i>Trypanosoma cruzi</i> (Chagas) |



⁽¹⁾ Kit available with extraction control; ⁽²⁾ Research Use Only



► Sexual health

MULTIPLEX

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

MONOPLEX

| Reference | Description |
|-----------|---------------------------|
| GBS | <i>Streptococcus B</i> |
| TPA | <i>Treponema pallidum</i> |



► Infections in the immunosuppressed & Meningitis

MULTIPLEX

| Reference | Description |
|-----------|--------------------------------------------------------|
| BJV | BK + JC Virus |
| HHZ | Herpes Virus 1, Herpes Virus 2 & Varicela Zoster Virus |
| HHV | Human Herpes Virus 6, 7 & 8 |

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



► Antimicrobial resistance

MULTIPLEX

| Reference | Description |
|-----------|----------------------------------------------|
| VAN | Vancomycin resistance |
| CLA | <i>H. pylori + Clarithromycin resistance</i> |

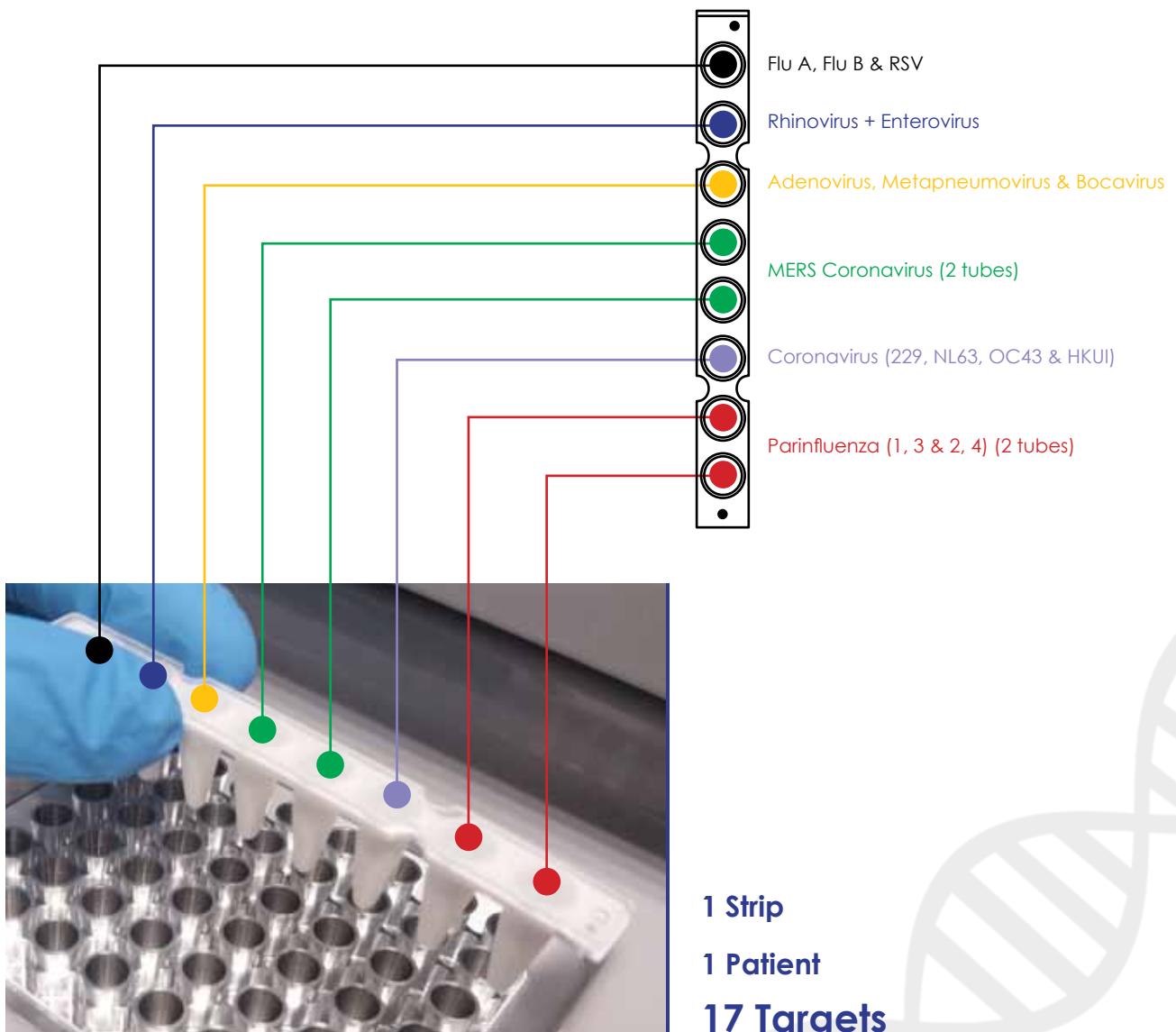
(1) Kit available with extraction control; (2) Research Use Only

VIASURE Hyperplex

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 ^(¹)

Ref. GP01

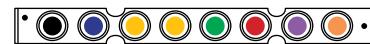
- *Salmonella, Campylobacter & Y. enterocolitica*
- *Shigella/EIEC*
- *Cryptosporidium, Giardia & E. histolytica*
- *Norovirus GI + GII*
- *Rotavirus*
- *Adenovirus*
- *Astrovirus*
- *Sapovirus*



► Gastrointestinal panel II ^(¹)

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*



► Gastrointestinal panel III

Ref. GP03

- *Salmonella, Campylobacter & Shigella/EIEC*
- *Aeromonas spp. + Yersinia enterocolitica*
- *E. coli typing (2 tubes)*

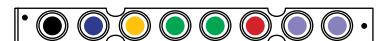


^(¹) Kit available with extraction control; ^(²) Research Use Only

► Respiratory panel I (¹)

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)**



► Respiratory panel II (²)

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



► Respiratory panel III (¹) (²)

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



(¹) Kit available with extraction control; (²) Research Use Only

► Sexual health panel I (²)

Ref. SP01

- N. gonorrhoeae, C. trachomatis & M. genitalium +
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 (¹)

Ref. TP01

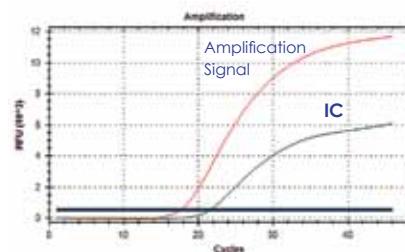
- Zika, Dengue & Chikungunya Virus
- West Nile
- Yellow Fever
- Mayaro Virus



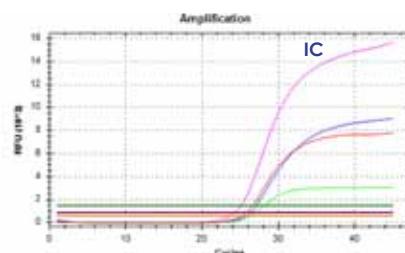
Molecular detection techniques have revolutionized clinical diagnosis over the past several years.

In particular, 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.

The Real Time PCR allows us to identify the causal pathogens of the infectious diseases by the use of specific primers and a fluorescent-labelled probe that hybridizes to a specific region of the target gene.



Positive monoplex sample:
Amplification Signal and Internal Control



Positive multiplex sample:
Amplification Signal and Internal Control

(¹) Kit available with extraction control; (²) Research Use Only

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

Compatibilities

| Low Profile Block Thermocyclers | | High Profile Block Thermocyclers | |
|---------------------------------|-----------------------------------------------|-----------------------------------|-------------------------------------------------------------------|
| Manufacturer | Model | Manufacturer | Model |
| Agilent Technologies | AriaMx / AriaDx | Abbott | Abbott m2000 |
| Applied Biosystems | 7500 Fast ⁽¹⁾ | Applied Biosystems | 7300 |
| Applied Biosystems | 7500 Fast Dx ⁽¹⁾ | Applied Biosystems | 7500 |
| Applied Biosystems | QuantStudio™ 3 ⁽²⁾ | Applied Biosystems | 7900 HT |
| Applied Biosystems | QuantStudio™ 5 | Applied Biosystems | ABI PRISM 7000 |
| Applied Biosystems | QuantStudio™ 6 Flex 96-well Fast | Applied Biosystems | ABI PRISM 7700 |
| Applied Biosystems | QuantStudio™ 7 Flex 96-well Fast | Applied Biosystems | QuantStudio™ 3 ⁽²⁾ |
| Applied Biosystems | QuantStudio™ 12K Flex 96-well Fast | Applied Biosystems | QuantStudio™ 5 |
| Applied Biosystems | StepOne Plus TM ⁽²⁾ | Applied Biosystems | QuantStudio™ 6 Flex 96-well |
| Applied Biosystems | StepOne TM ⁽²⁾ | Applied Biosystems | QuantStudio™ 7 Flex 96-well |
| Applied Biosystems | ViiA™ 7 Fast | Applied Biosystems | QuantStudio™ 12K Flex 96-well |
| Bioneer | Exicycler TM 96 | Applied Biosystems | ViiA™ 7 |
| Bio-Rad | CFX96 TM / CFX96 TM IVD | Analytik Jena Biometra | TOptical |
| Bio-Rad | Mini Opticon TM | Analytik Jena Biometra | qTOWER 2.0 |
| Cepheid | SmartCycler® ⁽³⁾ | Bioneer | Exicycler TM 96 |
| Qiagen | Rotor-Gene® Q ⁽³⁾ | Bio-Rad | CFX96 TM Deep Well / CFX96 TM Deep Well IVD |
| Roche | LightCycler® 480 | Bio-Rad | iCycler iQ TM |
| Roche | LightCycler® 96 | Bio-Rad | iCycler iQ TM 5 |
| Roche | Cobas z480 Analyzer | Bio-Rad | MyIQ TM |
| | | Bio-Rad | MyIQ TM 2 |
| | | Cepheid | SmartCycler® ⁽³⁾ |
| | | DNA-Technology | DTprime |
| | | DNA-Technology | DTlite |
| | | Eppendorf | Mastercycler TM ep realplex |
| | | Qiagen | Rotor-Gene® Q ⁽³⁾ |
| | | Stratagene / Agilent Technologies | Mx3000P TM |
| | | Stratagene / Agilent Technologies | Mx3005P TM |
| | | VIASURE | VIASURE 48 |
| | | VIASURE | VIASURE 96 |

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

⁽¹⁾ Select Ramp Speed "Standard".

⁽²⁾ No detection in Cy5 channel.

⁽³⁾ The product should be reconstituted following the appropriate procedure and transferred into specific Rotor-Gene® or SmartCyclers® tubes.



Benefits & Advantages

- Lyophilised product.**
Forget about the cold chain
- Same thermal protocol for all our kits.
Create your own panel
- "Ready & Easy-to-use" kits
- Long term stability.
Transport and storage at room temperature
- Shelf-life: 24 months**
(for all our qPCR products)
- From 1 **up to 96 samples** per assay
- High sensibility, specificity and reproducibility
- Validated according to **ISO 13485**
and **CE marked**



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One step ahead