

## BactoReal<sup>®</sup> Kits for detection of bacteria

Product Name	Channel Pathogen	Channel IPC	Order Number
<b>BactoReal<sup>®</sup> Kit <i>A. baumannii</i> &amp; <i>P. mirabilis</i></b> (CE-IVD) Detection of the <i>rpoB</i> gene of <i>A. baumannii</i> and the <i>ureC</i> gene of <i>P. mirabilis</i>	FAM + VIC	Cy5	DHUS00653
<b>BactoReal<sup>®</sup> Kit <i>Bartonella</i> spp.</b> (RUO) Detection of the <i>gltA</i> gene of <i>B. clarridgeiae</i> , <i>B. elizabethae</i> , <i>B. grahamii</i> , <i>B. henselae</i> , <i>B. koehlerae</i> , <i>B. quintana</i> , <i>B. volans</i> and <i>B. washoensis</i>	FAM	Cy5	DHUB03953
<b>BactoReal<sup>®</sup> Kit <i>Bordetella</i> Multiplex</b> (CE-IVD) Detection of the insertion sequence IS1001 of <i>B. parapertussis</i> , <i>B. bronchiseptica</i> and <i>B. holmesii</i> as well as detection of the insertion sequence IS481 of <i>B. pertussis</i> , <i>B. holmesii</i> and <i>B. bronchiseptica</i>	FAM + VIC	Cy5	DHUB00453
<b>BactoReal<sup>®</sup> Kit <i>Borrelia burgdorferi sensu lato</i></b> (CE-IVD) Detection of the <i>ospA</i> gene of <i>Borrelia</i> species belonging to the <i>Borrelia burgdorferi sensu lato</i> complex	FAM	Cy5	DHUB05053
<b>BactoReal<sup>®</sup> Kit <i>Brucella</i> spp.</b> (RUO) Detection of the IS711 region of <i>B. abortus</i> , <i>B. ovis</i> , <i>B. melitensis</i> , <i>B. suis</i> and <i>B. canis</i>	FAM	Cy5	DHUB02153
<b>BactoReal<sup>®</sup> Kit <i>Chlamydomphila pneumoniae</i></b> (RUO) Detection of the <i>ompA</i> gene of <i>C. pneumoniae</i>	FAM	Cy5	DHUB00953
<b>BactoReal<sup>®</sup> Kit <i>Chlamydomphila psittaci/abortus</i></b> (RUO) Detection of the <i>omp1</i> gene of <i>C. abortus</i> and <i>C. psittaci</i>	FAM	Cy5	DHUB03053
<b>BactoReal<sup>®</sup> Kit <i>E. coli</i> &amp; <i>Klebsiella</i></b> (CE-IVD) Detection of the <i>dxs</i> gene of <i>E. coli</i> and the <i>khe</i> gene of <i>K. pneumoniae</i> , <i>K. variicola</i> , <i>K. oxytoca</i>	FAM + VIC	Cy5	DHUS00153
<b>BactoReal<sup>®</sup> Kit <i>vanA</i> &amp; <i>Enterococcus</i> spp.</b> (CE-IVD) Detection of the <i>vanA</i> gene and the 23S rRNA gene of <i>Enterococcus</i> spp.	FAM + VIC	Cy5	DHUS00453
<b>BactoReal<sup>®</sup> Kit <i>P. aeruginosa</i> &amp; <i>Enterobacter</i> spp.</b> (CE-IVD) Detection of the 16S rRNA gene of <i>P. aeruginosa</i> and the <i>rpoB</i> gene of <i>Enterobacter</i> spp.	FAM + VIC	Cy5	DHUS00553
<b>BactoReal<sup>®</sup> Kit <i>Haemophilus influenzae</i></b> (CE-IVD) Detection of the <i>ompP6</i> gene of <i>H. influenzae</i>	FAM	Cy5	DHUB01053
<b>BactoReal<sup>®</sup> Kit <i>H. pylori</i> ClariRes</b> (CE-IVD) Detection of the 23S rRNA gene of <i>H. pylori</i> and determination of its clarithromycin resistance	SYBR <sup>®</sup> Green	SYBR <sup>®</sup> Green	DHUB1000
<b>BactoReal<sup>®</sup> Kit <i>Legionella pneumophila</i></b> (CE-IVD) Detection of the 23S-5S rDNA intergenic spacer region of <i>L. pneumophila</i>	FAM	Cy5	DHUB01153
<b>BactoReal<sup>®</sup> Kit <i>Leptospira</i> spp. (16S rDNA)</b> (RUO) Detection of the 16S rRNA gene of pathogenic and intermediately pathogenic <i>Leptospira</i> species	VIC	Cy5	DHUB00553

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<b>BactoReal® Kit <i>Leptospira</i> spp. (LipL32)</b> <sup>(RUO)</sup> Detection of the LipL32 gene of pathogenic <i>Leptospira</i> species	FAM	Cy5	DHUB00653
<b>BactoReal® Kit <i>Leptospira</i> spp. Multiplex (16S rDNA + LipL32)</b> <sup>(RUO)</sup> Detection and differentiation of LipL32 and 16S rRNA gene of pathogenic and intermediately pathogenic <i>Leptospira</i> species	FAM + VIC	Cy5	DHUB00753
<b>BactoReal® Kit <i>Listeria monocytogenes</i></b> <sup>(CE-IVD)</sup> Detection of the hlyA gene of <i>L. monocytogenes</i>	FAM	Cy5	DHUB00853
<b>BactoReal® Kit <i>Mycoplasma pneumoniae</i></b> <sup>(CE-IVD)</sup> Detection of the 16S rRNA gene of <i>M. pneumoniae</i>	FAM	Cy5	DHUB01253
<b>BactoReal® Kit <i>Neisseria meningitidis</i></b> <sup>(CE-IVD)</sup> Detection of the ctrA gene of <i>N. meningitidis</i>	FAM	Cy5	DHUB00153
<b>BactoReal® Kit <i>Staphylococcus</i> spp. &amp; <i>S. aureus</i></b> <sup>(CE-IVD)</sup> Detection of the 23S rRNA gene of <i>Staphylococcus</i> spp. and the nuc gene of <i>S. aureus</i>	FAM + VIC	Cy5	DHUS00253
<b>BactoReal® Kit <i>Streptococcus agalactiae</i></b> <sup>(RUO)</sup> Detection of the cfb gene of <i>S. agalactiae</i>	FAM	Cy5	DHUB01553
<b>BactoReal® Kit <i>S. pneumoniae</i> &amp; <i>Streptococcus</i> spp.</b> <sup>(CE-IVD)</sup> Detection of the lytA gene of <i>S. pneumoniae</i> and the 23S rRNA gene of <i>Streptococcus</i> spp.	FAM + VIC	Cy5	DHUS00353
<b>BactoReal® Kit <i>Streptococcus pneumoniae</i></b> <sup>(CE-IVD)</sup> Detection of the lytA gene of <i>S. pneumoniae</i>	FAM	Cy5	DHUB01453
<b>BactoReal® Kit <i>Tropheryma whippelii</i></b> <sup>(RUO)</sup> Detection of the groEL gene of <i>T. whippelii</i>	FAM	Cy5	DHUB01653

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## ViroReal® Kits for detection of viruses

Product Name	Channel Pathogen	Channel IPC	Order Number
<b>ViroReal® Kit Adenovirus (CE-IVD)</b> Detection of the hexon gene of human adenovirus species A-G	FAM	Cy5	DHUV00153
<b>ViroReal® Kit Enterovirus (CE-IVD)</b> Detection of RNA of the 5' UTR of enterovirus	FAM	Cy5	DHUV00353
<b>ViroReal® Kit Human Coronavirus alpha (RUO)</b> Detection of RNA of the N gene of human coronavirus NL63 and 229E	FAM + VIC	Cy5	DHUV01153
<b>ViroReal® Kit Human Coronavirus beta (RUO)</b> Detection of RNA of the N gene of human coronavirus HKU1, OC43, MERS	FAM + VIC	Cy5	DHUV01253
<b>ViroReal® Kit Influenza A/B (CE-IVD)</b> Detection of RNA of the matrix protein gene of influenza A virus as well as of the hemagglutinin gene of influenza B virus	FAM + VIC	Cy5	DHUV00253
<b>ViroReal® Kit Metapneumovirus (CE-IVD)</b> Detection of RNA of the nucleocapsid protein gene of hMPV A and hMPV B	FAM	Cy5	DHUV01553
<b>ViroReal® Kit Monkeypox Virus (RUO)</b> Detection of the B9R gene of monkeypox virus (West African and Congo Basin clade)	FAM	Cy5	DHUV02753
<b>ViroReal® Kit Parainfluenzavirus (CE-IVD)</b> Detection of RNA of the HN gene of HPIV-1, HPIV-2, HPIV-3, HPIV-4	FAM + VIC	Cy5	DHUV01653
<b>ViroReal® Kit Parechovirus (RUO)</b> Detection of RNA of the polyprotein gene of human parechovirus strains 1-6	FAM	Cy5	DHUV01753
<b>ViroReal® Kit Rhinovirus (A, B, C) (CE-IVD)</b> Detection of RNA of the 5' UTR of human rhinovirus A, B and C	FAM	Cy5	DHUV01953
<b>ViroReal® Kit Rotavirus (RUO)</b> Detection of RNA of the NSP4 gene of rotavirus strains genotype A, most strains of genotype B, C and some strains of the other genotypes D-G	FAM	Cy5	DHUV02053
<b>ViroReal® Kit RSV (A &amp; B) (CE-IVD)</b> Detection of RNA of the nucleocapsid protein gene of human respiratory syncytial virus subtypes A & B	FAM	Cy5	DHUV02153
<b>ViroReal® Kit SARS-CoV2 &amp; SARS (CE-IVD)</b> Detection of RNA of the nucleocapsid protein gene of Sarbecovirus (coronavirus SARS-CoV-2, SARS-CoV and SARS-like CoV)	FAM	Cy5	DHUV02313 DHUV02313x5
<b>ViroReal® Kit SARS-CoV2 Multiplex (CE-IVD)</b> Detection of RNA of the nucleocapsid protein (N) gene of Sarbecovirus inclusively SARS-CoV-2 and of RNA-dependent RNA polymerase (RdRp) gene of SARS-CoV-2	FAM + VIC	Cy5	DHUV02413 DHUV02413x5
<b>ViroReal® Kit SARS Coronavirus &amp; Influenza A/B (CE-IVD)</b> Detection of RNA of the nucleocapsid protein (N) gene of Sarbecovirus inclusively SARS-CoV-2, of RNA of the matrix protein gene of influenza A virus and of RNA of the hemagglutinin gene of influenza B virus	FAM + VIC	Cy5	DHUV02513 DHUV02513x5

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## MycoReal<sup>®</sup> Kits for detection of fungi

Product Name	Channel Pathogen	Channel IPC	Order Number
<b>MycoReal<sup>®</sup> Kit <i>Aspergillus</i></b> (CE-IVD) Detection and differentiation of the ITS2 region of <i>A. fumigatus</i> , <i>A. flavus</i> , <i>A. terreus</i> , <i>A. niger</i> and <i>A. nidulans</i>	FAM + VIC	Cy5	DHUF00253
<b>MycoReal<sup>®</sup> Kit <i>Candida</i> &amp; <i>A. fumigatus</i></b> (CE-IVD) Detection and differentiation of the ITS2 region of <i>C. albicans</i> , <i>C. tropicalis</i> , <i>C. dubliniensis</i> , <i>C. glabrata</i> , <i>C. krusei</i> and <i>C. parapsilosis</i> complex	FAM + VIC	Cy5	DHUF00153
<b>MycoReal<sup>®</sup> Kit <i>Pneumocystis</i></b> (CE-IVD) Detection of the mt LSU gene of <i>Pneumocystis jirovecii</i>	FAM	Cy5	DHUF00353
<b>MycoReal<sup>®</sup> Kit Fungi</b> (RUO) Detection of the ITS region of fungi	FAM	Cy5	DHUF00453

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## PanReal Kit for universal detection of fungi and bacteria

Product Name	Channel Pathogen	Channel IPC	Order Number
<b>PanReal Kit Fungi &amp; Bacteria</b> (RUO) Detection of the ITS2 region of fungi and the 16S rRNA gene of bacteria. Sequencing primer included.	FAM + VIC	Cy5	DHUFB0153

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## ParoReal<sup>®</sup> Kits for detection of parasites

Product Name	Channel Pathogen	Channel IPC	Order Number
<b>ParoReal<sup>®</sup> Kit <i>Acanthamoeba</i> T4</b> (CE-IVD) Detection of the 18S rRNA gene of <i>Acanthamoeba</i> genotype T4	FAM	Cy5	DHUP00153

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FetoGnost<sup>®</sup> Kits for detection of human DNA

Product Name	Channel Human Target	Channel IPC	Order Number
<b>FetoGnost<sup>®</sup> Kit RHD</b> <small>(CE-IVD)</small> Detection of fetal DNA (rhesus factor D Exon 5, 7 and 10) from maternal plasma of non-immunized RhD negative women (non-invasive prenatal determination of fetal RHD status, NIPT-RHD) PCR-platform: ABI <sup>®</sup> 7500 instrument, QantStudio <sup>™</sup> 5/6/7 (Thermo Fisher Scientific)	FAM + VIC + NED	Cy5	HUFG100, HUFG500
<b>FetoGnost<sup>®</sup> Kit Control</b> <small>(RUO)</small> Detection of one maternal marker and two fetal markers for the detection of cell-free fetal DNA (cffDNA) in maternal plasma PCR-platform: ABI <sup>®</sup> 7500 instrument, QantStudio <sup>™</sup> 5/6/7 (Thermo Fisher Scientific)	FAM + VIC + NED	Cy5	HUFG050

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## General information on ingenetix kits

**Kit contents:**

- Assay (primer + probe) for detection of pathogen
- Assay (primer + probe) + IPC target for detection (Cy5 channel) of Internal Positive Control (IPC)
- Positive Control
- Reaction Mix
- Water

**PCR-platforms:**

developed for use with

- ABI<sup>®</sup> 7500 instrument (Thermo Fisher Scientific)
- QantStudio<sup>™</sup> 5/6/7 (Thermo Fisher Scientific)
- LightCycler<sup>®</sup> 480 (Roche)
- Mx3005P<sup>®</sup> QPCR System (Agilent)

and designed for compatibility with **real-time PCR instruments** detecting and differentiating fluorescence in FAM and VIC or Cy5 channel except capillary systems

**Kits are optimized to run under the same thermal cycling conditions**

**RNA and DNA material can be analysed in one PCR run**

## ingenetix Assays

Product Name	Channel Pathogen	Order Number
<b>H. pylori ClariRes Assay</b> <sup>(CE-IVD)</sup> Detection of the 23S rRNA gene of <i>H. pylori</i> and determination of its clarithromycin resistance. DNA Reaction Mix is not included (recommended: LC™-FastStart DNA Master SYBR® Green I) PCR-platform: Only LightCycler® 1.2/1.5/2.0 on basis of melting curve analysis	Cy5	RTGM100
<b>BactoReal® Leptospira spp. (16S rDNA)</b> <sup>(RUO)</sup> Detection of the 16S rRNA gene of pathogenic and intermediately pathogenic <i>Leptospira</i> species. DNA Reaction Mix is not included.	VIC	RTGM1700
<b>ViroReal® Assay Influenza A/B</b> <sup>(CE-IVD)</sup> Detection of RNA of the matrix protein gene of influenza A virus and of RNA of the hemagglutinin gene of influenza B virus <b>Only for use in combination with ViroReal® Kit SARS-CoV-2 &amp; SARS</b>	VIC	RTGM001RV RTGM002RV

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## Assays for detection of internal positive control

For use with ingenetix assays or customer assays

Product Name	Channel	Order Number
<b>ControlReal 1</b> <sup>(RUO)</sup> Detection of internal control DNA target (in assay mix). Recommended for ABI® 7500, Quantstudio™, Mx3005P®	VIC	RTGMCR-1
<b>ControlReal 2</b> <sup>(RUO)</sup> Detection of internal control DNA target (in assay mix). Recommended for LightCycler® 1.2/1.5/2.0	NED (F2, 610 nm)	RTGMCR-2
<b>ControlReal 3</b> <sup>(RUO)</sup> Detection of internal control DNA target (in assay mix). Recommended for ABI® 7500, Quantstudio™, LightCycler® 480, Mx3005P®	Cy5	RTGMCR-3
<b>Internal Positive Control Assay 1</b> <sup>(RUO)</sup> Detection of internal control DNA target (in extra tube). Recommended for ABI® 7500, Quantstudio™, Mx3005P®	VIC	RTGMIPC-1
<b>Internal Positive Control Assay 2</b> <sup>(RUO)</sup> Detection of internal control DNA target (in extra tube). Recommended for LightCycler® 1.2/1.5/2.0	NED (F2, 610 nm)	RTGMIPC-2
<b>Internal Positive Control Assay 3</b> <sup>(RUO)</sup> Detection of internal control DNA target (in extra tube). Recommended for ABI® 7500, Quantstudio™, LightCycler® 480, Mx3005P®	Cy5	RTGMIPC-3
<b>Internal Positive RNA Control Assay 1</b> <sup>(RUO)</sup> Detection of internal control RNA target (in extra tube). Recommended for ABI® 7500, Quantstudio™, Mx3005P®	VIC	RTGMIPCR1
<b>Internal Positive RNA Control Assay 2</b> <sup>(RUO)</sup> Detection of internal control RNA target (in extra tube). Recommended for LightCycler® 1.2/1.5/2.0	NED (F2, 610 nm)	RTGMIPCR2
<b>Internal Positive RNA Control Assay 3</b> <sup>(RUO)</sup> Detection of internal control RNA target (in extra tube). Recommended for ABI® 7500, Quantstudio™, LightCycler® 480, Mx3005P®	Cy5	RTGMIPCR3

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