

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

Product Name	Channel Pathogen	Order Number
<b>BactoReal<sup>®</sup> Kit <i>A. baumannii</i> &amp; <i>P. mirabilis</i></b> (CE-IVD) <i>Coming soon</i> Detection of the rpoB gene of <i>A. baumannii</i> and the ureC gene of <i>P. mirabilis</i>	FAM & VIC	DHUS00653
<b>BactoReal<sup>®</sup> Kit <i>Bartonella</i> spp.</b> Detection of the gltA 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	DHUB03953
<b>BactoReal<sup>®</sup> Kit <i>Bordetella bronchiseptica</i></b> Detection of the bfrA gene of <i>B. bronchiseptica</i>	FAM	DHUB02453
<b>BactoReal<sup>®</sup> Kit <i>Bordetella parapertussis</i></b> Detection of the insertion sequence IS1001 of <i>B. parapertussis</i> , and of some strains of <i>B. bronchiseptica</i> and <i>B. holmesii</i>	FAM	DHUB00253
<b>BactoReal<sup>®</sup> Kit <i>Bordetella pertussis</i></b> Detection of the insertion sequence IS481 of <i>B. pertussis</i> , <i>B. holmesii</i> and some strains of <i>B. bronchiseptica</i>	FAM	DHUB00353
<b>BactoReal<sup>®</sup> Kit <i>Borrelia burgdorferi sensu lato</i></b> (CE-IVD) Detection of the ospA gene of <i>Borrelia</i> species belonging to the <i>Borrelia burgdorferi sensu lato</i> complex	FAM	DHUB05053
<b>BactoReal<sup>®</sup> Kit <i>Brucella</i> spp.</b> 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	DHUB02153
<b>BactoReal<sup>®</sup> Kit <i>Chlamydomphila pneumoniae</i></b> Detection of the ompA gene of <i>C. pneumoniae</i>	FAM	DHUB00953
<b>BactoReal<sup>®</sup> Kit <i>Chlamydomphila psittaci/abortus</i></b> Detection of the omp1 gene of <i>C. abortus</i> and <i>C. psittaci</i>	FAM	DHUB03053
<b>BactoReal<sup>®</sup> Kit <i>Clostridium difficile</i> Toxins</b> <i>Coming Soon</i> Detection and differentiation of toxin A (tcdA), toxin B (tcdB) and binary toxin gene of <i>C. difficile</i>	FAM & VIC	DHUB04253
<b>BactoReal<sup>®</sup> Kit <i>E. coli</i> Toxin Typing</b> Detection of the toxin genes stx1, stx2 (verotoxin), eae (intimin) and ehxA (enterohemolysin) of <i>E. coli</i>	FAM & VIC	DHUB02753
<b>BactoReal<sup>®</sup> Kit <i>E. coli</i> &amp; <i>Klebsiella</i></b> (CE-IVD) <i>Coming soon</i> Detection of the dxs gene of <i>E. coli</i> and the khe gene of <i>K. pneumoniae</i> , <i>K. variicola</i> , <i>K. oxytoca</i>	FAM & VIC	DHUS00153
<b>BactoReal<sup>®</sup> Kit VRE (vanA) &amp; <i>Enterococcus</i> spp.</b> (CE-IVD) <i>Coming soon</i> Detection of the vanA gene and the 23S rRNA gene of <i>Enterococcus</i> spp.	FAM & VIC	DHUS00453
<b>BactoReal<sup>®</sup> Kit <i>P. aeruginosa</i> &amp; <i>Enterobacter</i> spp.</b> (CE-IVD) <i>Coming soon</i> Detection of the 16S rRNA gene of <i>P. aeruginosa</i> and the rpoB gene of <i>Enterobacter</i> spp.	FAM & VIC	DHUS00553
<b>BactoReal<sup>®</sup> Kit <i>Haemophilus influenzae</i></b> (CE-IVD) Detection of the ompP6 gene of <i>H. influenzae</i>	FAM	DHUB01053

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<b>BactoReal® Kit Klebsiella</b> Detection of the hemolysin gene of <i>K. pneumoniae</i> , <i>K. variicola</i> , <i>K. oxytoca</i> , <i>K. aerogenes</i>	FAM	DHUB02853
<b>BactoReal® Kit Legionella pneumophila (CE-IVD)</b> Detection of the 23S-5S rDNA intergenic spacer region of <i>L. pneumophila</i>	FAM	DHUB01153
<b>BactoReal® Kit Leptospira spp. (16S rDNA)</b> Detection of the 16S rRNA gene of pathogenic and intermediately pathogenic <i>Leptospira</i> species	VIC	DHUB00553
<b>BactoReal® Kit Leptospira spp. (LipL32)</b> Detection of the LipL32 gene of pathogenic <i>Leptospira</i> species	FAM	DHUB00653
<b>BactoReal® Kit Leptospira spp. Multiplex (16S rDNA + LipL32)</b> Detection and differentiation of LipL32 and 16S rRNA gene of pathogenic and intermediately pathogenic <i>Leptospira</i> species	FAM & VIC	DHUB00753
<b>BactoReal® Kit Listeria monocytogenes (CE-IVD)</b> Detection of the hlyA gene of <i>L. monocytogenes</i>	FAM	DHUB00853
<b>BactoReal® Kit Mycoplasma pneumoniae (CE-IVD)</b> Detection of the 16S rRNA gene of <i>M. pneumoniae</i>	FAM	DHUB01253
<b>BactoReal® Kit Neisseria gonorrhoeae (CE-IVD)</b> Detection of the 16S rRNA gene of <i>N. gonorrhoeae</i>	FAM	DHUB01353
<b>BactoReal® Kit Neisseria meningitidis (CE-IVD)</b> Detection of the ctrA gene of <i>N. meningitidis</i>	FAM	DHUB00153
<b>BactoReal® Kit Pseudomonas aeruginosa</b> Detection of the 16S rRNA gene of <i>P. aeruginosa</i>	FAM	DHUB00263
<b>BactoReal® Kit Salmonella enterica</b> Detection of the invA gene of <i>S. enterica</i>	FAM	DHUB02563
<b>BactoReal® Kit Staphylococcus spp. &amp; S. aureus (CE-IVD) Coming soon</b> Detection of the 23S rRNA gene of <i>Staphylococcus</i> spp. and the nuc gene of <i>S. aureus</i>	FAM & VIC	DHUS00253
<b>BactoReal® Kit Streptococcus agalactiae</b> Detection of the cfb gene of <i>S. agalactiae</i>	FAM	DHUB01553
<b>BactoReal® Kit S. pneumoniae &amp; Streptococcus spp. (CE-IVD) Coming soon</b> Detection of the lytA gene of <i>S. pneumoniae</i> and the 23S rRNA gene of <i>Streptococcus</i> spp.	FAM & VIC	DHUS00353
<b>BactoReal® Kit Streptococcus pneumoniae (CE-IVD)</b> Detection of the lytA gene of <i>S. pneumoniae</i>	FAM	DHUB01453
<b>BactoReal® Kit Tropheryma whipplei</b> Detection of the groEL gene of <i>T. whipplei</i>	FAM	DHUB01653

## ViroReal<sup>®</sup> Kits for detection of viruses

Product Name	Channel Pathogen	Order Number
<b>ViroReal<sup>®</sup> Kit Adenovirus</b> (CE-IVD) Detection of the hexon gene of human adenovirus species A-G	FAM	DHUV00153
<b>ViroReal<sup>®</sup> Kit Enterovirus</b> (CE-IVD) Detection of RNA of the 5' UTR of enterovirus	FAM	DHUV00353
<b>ViroReal<sup>®</sup> Kit HDV</b> Detection of the 5'UTR of human hepatitis D virus	FAM	DHUV00953
<b>ViroReal<sup>®</sup> Kit HHV-6A, B</b> Detection of the U65/U66 gene of human herpes virus type 6 subtypes A and B	FAM	DHUV00653
<b>ViroReal<sup>®</sup> Kit HHV-6A</b> Detection of the U65/U66 gene of human herpes virus type 6 subtype A	FAM	DHUV00453
<b>ViroReal<sup>®</sup> Kit HHV-6B</b> Detection of the U65/U66 gene of human herpes virus type 6 subtype B	FAM	DHUV00553
<b>ViroReal<sup>®</sup> Kit HHV-7</b> Detection of the glycoprotein H gene of human herpes virus type 7	FAM	DHUV00753
<b>ViroReal<sup>®</sup> Kit HHV-8</b> Detection of the ORF26 of human herpes virus type 8	FAM	DHUV00853
<b>ViroReal<sup>®</sup> Kit Human Coronavirus alpha</b> Detection of RNA of the N gene of human coronavirus NL63 and 229E	FAM & VIC	DHUV01153
<b>ViroReal<sup>®</sup> Kit Human Coronavirus beta</b> Detection of RNA of the N gene of human coronavirus HKU1, OC43, MERS	FAM & VIC	DHUV01253
<b>ViroReal<sup>®</sup> Kit Influenza A</b> (CE-IVD) Detection of RNA of the matrix protein gene of influenza A virus	FAM	DHUV01353
<b>ViroReal<sup>®</sup> Kit Influenza B</b> (CE-IVD) Detection of RNA of the hemagglutinin gene of influenza B virus	FAM	DHUV01453
<b>ViroReal<sup>®</sup> Kit Metapneumovirus*</b> (CE-IVD) Detection of RNA of the nucleocapsid protein gene of hMPV A and hMPV B	FAM	DHUV01553
<b>ViroReal<sup>®</sup> Kit Parainfluenzavirus</b> (CE-IVD) Detection of RNA of the HN gene of HPIV-1, HPIV-2, HPIV-3, HPIV-4	FAM & VIC	DHUV01653
<b>ViroReal<sup>®</sup> Kit Parechovirus</b> Detection of RNA of the polyprotein gene of human parechovirus strains 1-6	FAM	DHUV01753
<b>ViroReal<sup>®</sup> Kit Parvovirus B19</b> Detection of the VP1 gene of parvovirus B19 genotypes 1, 2 and 3	FAM	DHUV01853
<b>ViroReal<sup>®</sup> Kit Rhinovirus (A, B, C)</b> (CE-IVD) Detection of RNA of the 5' UTR of human rhinovirus A, B and C	FAM	DHUV01953
<b>ViroReal<sup>®</sup> Kit Rotavirus</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	DHUV02053

Product Name	Channel Pathogen	Order Number
<b>ViroReal® Kit RSV (A &amp; B)</b> (CE-IVD) Detection of RNA of the nucleocapsid protein gene of human respiratory syncytial virus subtypes A & B	FAM	DHUV02153
<b>ViroReal® Kit SARS-CoV2 &amp; SARS</b> (CE-IVD) Detection of RNA of the nucleocapsid protein gene of Sarbecovirus (coronavirus SARS-CoV-2, SARS-CoV and SARS-like CoV)	FAM	DHUV02353 DHUV02313 DHUV02313x5
<b>ViroReal® Assay Influenza A/B</b> (CE-IVD) 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
<b>ViroReal® Kit SARS-CoV2 Multiplex</b> (CE-IVD) 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	DHUV02413 DHUV02413x5
<b>ViroReal® Kit SARS Coronavirus &amp; Influenza A/B</b> (CE-IVD) 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	DHUV02513 DHUV02513x5
<b>ViroReal® Kit RT-LAMP SARS-CoV-2</b> (CE-IVD) Detection of RNA of the ORF1ab region of Sarbecovirus inclusively SARS-CoV-2	FAM	DHUV02610 DHUV02610x5
<b>ViroReal® Kit VZV</b> Detection of the ORF29 of varicella zoster virus	FAM	DHUV02253

\*not available in BE, DE, DK, ES, FR, GB, IT, LI, NL, AU, CN, JP, KR, TW, US, PL, NO, CH, HU, IE, LU, TR

## MycoReal Kits for detection of fungi

Product Name	Channel Pathogen	Order Number
<b>MycoReal Kit Aspergillus</b> (CE-IVD) <b>NEW</b> 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	DHUF00253
<b>MycoReal Kit Candida &amp; A. fumigatus</b> (CE-IVD) <b>Coming soon</b> 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	DHUF00153
<b>MycoReal Kit Pneumocystis</b> <b>New</b> Detection of the mt LSU gene of <i>Pneumocystis jirovecii</i>	FAM	DHUF00353

## PanReal Kit for universal detection of fungi and bacteria

Product Name	Channel Pathogen	Order Number
<b>PanReal Kit Fungi &amp; Bacteria</b> Detection of the ITS2 region of fungi and the 16S rRNA gene of bacteria	FAM & VIC	DHUFB0153

## ParoReal Kits for detection of parasites

Product Name	Channel Pathogen	Order Number
<b>ParoReal Kit Acanthamoeba</b> Detection of the 18S rRNA gene of <i>Acanthamoeba</i>	FAM	DHUP00153

## SeptiReal Kits for detection of bacteria and fungi of sepsis patients

Product Name	Channel Pathogen	Order Number
<b>SeptiReal Kit Module 1-8</b> <small>(CE-IVD) Coming soon</small> Module 1: <i>E. coli</i> (dxs gene) + <i>K. pneumoniae</i> , <i>K. variicola</i> , <i>K. oxytoca</i> (khe gene) Module 2: <i>Staphylococcus</i> spp. (23S rRNA gene) + <i>S. aureus</i> (nuc gene) Module 3: <i>S. pneumoniae</i> (lytA gene) + <i>Streptococcus</i> spp. (23S rRNA gene) Module 4: Vancomycin resistance (vanA gene) + <i>Enterococcus</i> spp. (23S rRNA gene) Module 5: <i>P. aeruginosa</i> (16S rRNA gene) + <i>Enterobacter</i> spp. (rpoB gene) Module 6: <i>A. baumannii</i> (rpoB gene) + <i>P. mirabilis</i> (ureC gene) Module 7: <i>C. parapsilosis</i> complex + <i>C. glabrata</i> , <i>C. krusei</i> and (ITS2 region) Module 8: <i>C. albicans</i> , <i>C. tropicalis</i> , <i>C. dubliniensis</i> + <i>A. fumigatus</i> (ITS2 region)	FAM & VIC	DHUS01853
<b>SeptiReal Kit Module 1-6</b> <small>(CE-IVD) Coming soon</small> Module 1: <i>E. coli</i> (dxs gene) + <i>K. pneumoniae</i> , <i>K. variicola</i> , <i>K. oxytoca</i> (khe gene) Module 2: <i>Staphylococcus</i> spp. (23S rRNA gene) + <i>S. aureus</i> (nuc gene) Module 3: <i>S. pneumoniae</i> (lytA gene) + <i>Streptococcus</i> spp. (23S rRNA gene), Module 4: Vancomycin resistance (vanA gene) + <i>Enterococcus</i> spp. (23S rRNA gene) Module 5: <i>P. aeruginosa</i> (16S rRNA gene) + <i>Enterobacter</i> spp. (rpoB gene) Module 6: <i>A. baumannii</i> (rpoB gene) + <i>P. mirabilis</i> (ureC gene)	FAM & VIC	DHUS01653

## General information on ingenetix kits

### Kit contents (50 reactions):

- 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

- Applied Biosystems® 7500 instrument (Thermo Fisher Scientific)
- LightCycler® 480 (Roche)
- Mx3005P® 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**

# H. pylori ClariRes Assay

Product Name	Channel Pathogen & IPC	Order Number
<b>H. pylori ClariRes Assay (CE-IVD)</b> Detection of the 23S rRNA gene of <i>H. pylori</i> and determination of its clarithromycin resistance. IVD certified.	Cy5	RTGM100

**Contents (50 reactions):**

- Assay (primer + probe) for detection of pathogen and internal positive control
- Positive Controls
- Internal Positive Control Target
- Water
- PCR-platform: Only LightCycler® 1.2/1.5/2.0 on basis of melting curve analysis
- Attention: Amplification mix is not included.  
Recommended amplification mix is LC™-FastStart DNA Master SYBR® Green I



# MycoReal assays for detection of fungi

Product Name	Channel Pathogen & IPC	Order Number
<b>MycoReal Aspergillus</b> Detection of the ITS2-region of <i>A. fumigatus</i> , <i>A. flavus</i> , <i>A. nidulans</i> , <i>A. niger</i> and <i>A. terreus</i> PCR-platform: Only LightCycler® 2.0 Recommended amplification mix (not included): LC™-FastStart DNA Master Kit Hybridisation Probes	Aspergillus: 640 nm, 705 nm IPC: 610 nm	RTPM100
<b>MycoReal Candida</b> Detection of the ITS2-region of <i>C. albicans</i> , <i>C. dubliniensis</i> , <i>C. glabrata</i> , <i>C. krusei</i> , <i>C. lusitanae</i> , <i>C. parapsilosis</i> , and <i>C. tropicalis</i> PCR-platform: Only LightCycler® 2.0 Recommended amplification mix (not included): LC™-FastStart DNA Master Kit Hybridisation Probes	Candida: 640 nm, 670 nm, 705 nm IPC: 610 nm	RTPM200
<b>MycoReal Fungi</b> Detection of the ITS2-region of fungi (panfungal), species identification via sequencing and BLAST analysis PCR-platform: Only LightCycler® 2.0 Recommended amplification mix (not included): LC™-FastStart DNA Master Kit Hybridisation Probes	Fungi: 640 nm IPC: 610 nm	RTPM300
<b>MycoReal Pneumocystis</b> Detection of the mt LSU gene of <i>Pneumocystis jirovecii</i> PCR-platform: LightCycler® 1.2/1.5/2.0/480, ABI PRISM® 7500, Mx3005P® Recommended amplification mix (not included): <ul style="list-style-type: none"> <li>• For LightCycler® 2.0: LC™-FastStart DNA Master Kit Hybridisation Probes</li> <li>• For Applied Biosystems® 7500, Mx3005P®, LightCycler® 480: TaqMan® Gene Expression Master Mix</li> </ul>	Pneumocystis: FAM IPC: 610 nm IPC: VIC / HEX IPC: Cy5	RTPM400 or RTPM401 or RTPM403

# General information on MycoReal assays

**Content:**

- Assay (primer + probe) for detection of pathogen (50 reactions)
- Assay for detection of internal positive control (IPC)
- Positive Control(s)
- Attention: Amplification mix is not included

Recommended amplification mix, depending on PCR-platform

- LC™-FastStart DNA Master Kit Hybridisation Probes for LightCycler® 1.2/1.5/2.0
- TaqMan® Gene Expression Master Mix for Applied Biosystems® 7500, Mx3005P®, LightCycler® 480



## Positive control standards

Product Name	Order Number
<b>BactoReal® Pseudomonas aeruginosa Standard</b> Contains a fragment of <i>P. aeruginosa</i> DNA at a concentration of 10 <sup>7</sup> copies/μl. Only for use with BactoReal® Kit <i>Pseudomonas aeruginosa</i>	PC900
<b>BactoReal® Salmonella enterica Standard</b> Contains a fragment of <i>S. enterica</i> DNA at a concentration of 10 <sup>7</sup> copies/μl. Only for use with BactoReal® Kit <i>Salmonella enterica</i>	PC600

## Assays for detection of internal positive control

For use with ingenetix assays or customer assays

Product Name	Channel	Order Number
<b>ControlReal 1</b> Detection of internal control DNA target (in assay mix). Recommended for Applied Biosystems® 7500, Mx3005P®	VIC / HEX	RTGMCR-1
<b>ControlReal 2</b> 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> Detection of internal control DNA target (in assay mix). Recommended for Applied Biosystems® 7500, LightCycler® 480, Mx3005P®	Cy5	RTGMCR-3
<b>Internal Positive Control Assay 1</b> Detection of internal control DNA target (in extra tube). Recommended for Applied Biosystems® 7500, Mx3005P®	VIC / HEX	RTGMIPC-1
<b>Internal Positive Control Assay 2</b> 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> Detection of internal control DNA target (in extra tube). Recommended for Applied Biosystems® 7500, LightCycler® 480, Mx3005P®	Cy5	RTGMIPC-3
<b>Internal Positive RNA Control Assay 1</b> Detection of internal control RNA target (in extra tube). Recommended for Applied Biosystems® 7500, Mx3005P®	VIC / HEX	RTGMIPCR1
<b>Internal Positive RNA Control Assay 2</b> 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> Detection of internal control RNA target (in extra tube). Recommended for Applied Biosystems® 7500, LightCycler® 480, Mx3005P®	Cy5	RTGMIPCR3