

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

Product Name	Channel Pathogen	Channel IPC	Reactions	Order Number
<b>BactoReal<sup>®</sup> Kit <i>Actinobacillus pleuropneumoniae</i></b> Detection of the <i>apxIVA</i> gene of <i>A. pleuropneumoniae</i>	FAM	VIC / HEX	100	DVEB02011
		VIC / HEX	50	DVEB02051
		CY5	100	DVEB02013
		CY5	50	DVEB02053
<b>BactoReal<sup>®</sup> Kit <i>Aerococcus viridans</i></b> Detection of the 16S rRNA gene of <i>A. viridans</i>	FAM	VIC / HEX	100	DVEB05311
		VIC / HEX	50	DVEB05351
		CY5	100	DVEB05313
		CY5	50	DVEB05353
<b>BactoReal<sup>®</sup> Kit American Foulbrood 1.1</b> Detection of the 16S rRNA gene of <i>Paenibacillus larvae</i>	FAM	VIC / HEX	100	DVEB05411
		VIC / HEX	50	DVEB05451
		CY5	100	DVEB05413
		CY5	50	DVEB05453
<b>BactoReal<sup>®</sup> Kit <i>Bartonella</i> spp.</b> 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	VIC / HEX	100	DVEB03911
		VIC / HEX	50	DVEB03951
		CY5	100	DVEB03913
		CY5	50	DVEB03953
<b>BactoReal<sup>®</sup> Kit <i>Bordetella bronchiseptica</i></b> Detection of the <i>bfrA</i> gene of <i>B. bronchiseptica</i>	FAM	VIC / HEX	100	DVEB02411
		VIC / HEX	50	DVEB02451
		CY5	100	DVEB02413
		CY5	50	DVEB02453
<b>BactoReal<sup>®</sup> Kit <i>Borrelia burgdorferi sensu lato</i></b> Detection of the <i>ospA</i> gene of <i>Borrelia</i> species belonging to the <i>Borrelia burgdorferi sensu lato</i> complex ( <i>B. spielmanii</i> is not well detected)	FAM	VIC / HEX	100	DVEB05011
		VIC / HEX	50	DVEB05051
		CY5	100	DVEB05013
		CY5	50	DVEB05053
<b>BactoReal<sup>®</sup> Kit <i>Brachyspira hyo/pilo</i></b> Combined detection of the <i>nox</i> gene of <i>B. hyopneumoniae</i> and <i>B. pilosicoli</i> . No differentiation between species.	FAM	VIC / HEX	100	DVEB01811
		VIC / HEX	50	DVEB01851
		CY5	100	DVEB01813
		CY5	50	DVEB01853
<b>BactoReal<sup>®</sup> Kit <i>Brachyspira hyodysenteriae</i></b> Detection of the <i>nox</i> gene of <i>B. hyodysenteriae</i>	FAM	VIC / HEX	100	DVEB01111
		VIC / HEX	50	DVEB01151
		CY5	100	DVEB01113
		CY5	50	DVEB01153
<b>BactoReal<sup>®</sup> Kit <i>Brachyspira pilosicoli</i></b> Detection of the <i>nox</i> gene of <i>B. pilosicoli</i>	FAM	VIC / HEX	100	DVEB01211
		VIC / HEX	50	DVEB01251
		CY5	100	DVEB01213
		CY5	50	DVEB01253
<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	VIC / HEX	100	DVEB02111
		VIC / HEX	50	DVEB02151
		CY5	100	DVEB02113
		CY5	50	DVEB02153
<b>BactoReal<sup>®</sup> Kit <i>Chlamydiaceae</i></b> Detection of the 23S rRNA gene of <i>C. muridarum</i> , <i>C. suis</i> , <i>C. trachomatis</i> , <i>C. abortus</i> , <i>C. caviae</i> , <i>C. felis</i> , <i>C. pecorum</i> , <i>C. pneumoniae</i> and <i>C. psittaci</i>	FAM	VIC / HEX	100	DVEB03111
		VIC / HEX	50	DVEB03151
		CY5	100	DVEB03113
		CY5	50	DVEB03153

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<b>BactoReal® Kit <i>Chlamydophila psittaci/abortus</i></b> Detection of the omp1 gene of <i>C. abortus</i> and <i>C. psittaci</i>	FAM	VIC / HEX	100	DVEB03011
		VIC / HEX	50	DVEB03051
		CY5	100	DVEB03013
		CY5	50	DVEB03053
<b>BactoReal® Kit <i>Clostridium difficile</i></b> Detection of the toxin A (tcdA) gene and toxin B (tcdB) gene of <i>C. difficile</i>	FAM + VIC / HEX	CY5	100	DVEB04213
		CY5	50	DVEB04253
<b>BactoReal® Kit <i>Clostridium perfringens</i></b> Detection of the 16S rRNA gene of <i>C. perfringens</i>	FAM	VIC / HEX	100	DVEB06511
		VIC / HEX	50	DVEB06551
		CY5	100	DVEB06513
		CY5	50	DVEB06553
<b>BactoReal® Kit <i>Corynebacterium pseudotuberculosis</i></b> Detection of the pld gene of <i>C. pseudotuberculosis</i>	FAM	VIC / HEX	100	DVEB05211
		VIC / HEX	50	DVEB05251
		CY5	100	DVEB05213
		CY5	50	DVEB05253
<b>BactoReal® Kit <i>Coxiella burnetii</i></b> Detection of the IS1111 insertion sequence of <i>C. burnetii</i>	FAM	VIC / HEX	100	DVEB05811
		VIC / HEX	50	DVEB05851
		CY5	100	DVEB05813
		CY5	50	DVEB05853
<b>BactoReal® Kit <i>Enterococcus</i> spp.</b> Detection of the 23S rRNA gene of <i>Enterococcus</i> species	FAM	VIC / HEX	100	DVEB03411
		VIC / HEX	50	DVEB03451
		CY5	100	DVEB03413
		CY5	50	DVEB03453
<b>BactoReal® Kit <i>Escherichia coli</i></b> Detection of the dxs gene of <i>E. coli</i> and <i>Shigella</i>	FAM	VIC / HEX	100	DVEB01911
		VIC / HEX	50	DVEB01951
		CY5	100	DVEB01913
		CY5	50	DVEB01953
<b>BactoReal® Kit <i>E. coli</i> Typing stx1 &amp; stx2 (STEC)</b> Detection of virulence-associated genes stx1 and stx2 (verotoxin) of <i>E. coli</i>	FAM + VIC / HEX	CY5	100	DVEB04013
		CY5	50	DVEB04053
<b>BactoReal® Kit <i>E. coli</i> Typing eae &amp; ehxA (EHEC, EPEC)</b> Detection of virulence-associated genes eae (intimin) and ehxA (enterohemolysin) of <i>E. coli</i>	FAM + VIC / HEX	CY5	100	DVEB04113
		CY5	50	DVEB04153
<b>BactoReal® Kit <i>E. coli</i> Typing eae (EHEC or EPEC)</b> Detection of virulence-associated gene eae (intimin) of <i>E. coli</i>	FAM	CY5	100	DVEB04313
		CY5	50	DVEB04353
<b>BactoReal® Kit <i>E. coli</i> Typing ehxA (EHEC)</b> Detection of virulence-associated gene ehxA (enterohemolysin) of <i>E. coli</i>	VIC / HEX	CY5	100	DVEB04413
		CY5	50	DVEB04453
<b>BactoReal® Kit European Foulbrood</b> Detection of the 16S rRNA gene of <i>Melissococcus plutonius</i>	FAM	VIC / HEX	100	DVEB05511
		VIC / HEX	50	DVEB05551
		CY5	100	DVEB05513
		CY5	50	DVEB05553
<b>BactoReal® Kit <i>Haemophilus parasuis</i></b> Detection of the 16S rRNA gene of <i>H. parasuis</i>	FAM	VIC / HEX	100	DVEB00411
		VIC / HEX	50	DVEB00451
		CY5	100	DVEB00413
		CY5	50	DVEB00453
<b>BactoReal® Kit <i>Lawsonia intracellularis</i></b> Detection of the 16S rRNA gene of <i>L. intracellularis</i>	FAM	VIC / HEX	100	DVEB01311
		VIC / HEX	50	DVEB01351
		CY5	100	DVEB01313
		CY5	50	DVEB01353
<b>BactoReal® Kit <i>Leptospira</i> spp. (16S rDNA)</b> Detection of the 16S rRNA gene of pathogenic and intermediately pathogenic <i>Leptospira</i> species	VIC / HEX	Cy5	100	DVEB00513
		Cy5	50	DVEB00553

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<b>BactoReal® Kit <i>Leptospira</i> spp. (LipL32)</b> Detection of the LipL32 gene of pathogenic <i>Leptospira</i> species	FAM	VIC / HEX	100	DVEB00611
		VIC / HEX	50	DVEB00651
		CY5	100	DVEB00613
		CY5	50	DVEB00653
<b>BactoReal® Kit <i>Leptospira</i> spp. Multiplex (16S+LipL32)</b> Detection and differentiation of LipL32 gene of pathogenic and 16S rRNA gene of pathogenic and intermediately pathogenic <i>Leptospira</i> species	FAM + VIC / HEX	Cy5	100	DVEB00713
		Cy5	50	DVEB00753
<b>BactoReal® Kit <i>Listeria monocytogenes</i></b> Detection of the hlyA gene of <i>L. monocytogenes</i>	FAM	VIC / HEX	100	DVEB00811
		VIC / HEX	50	DVEB00851
		CY5	100	DVEB00813
		CY5	50	DVEB00853
<b>BactoReal® Kit <i>Mannheimia haemolytica</i></b> Detection of the 16S rRNA gene of <i>M. haemolytica</i>	FAM	VIC / HEX	100	DVEB02911
		VIC / HEX	50	DVEB02951
		CY5	100	DVEB02913
		CY5	50	DVEB02953
<b>BactoReal® Kit <i>Mycobacterium avium</i> ssp. <i>paratuberculosis</i></b> Detection of the IS900 region of <i>M. avium</i> subspecies <i>paratuberculosis</i>	FAM	VIC / HEX	100	DVEB02211
		VIC / HEX	50	DVEB02251
		CY5	100	DVEB02213
		CY5	50	DVEB02253
<b>BactoReal® Kit <i>Mycobacterium tuberculosis</i> complex</b> Detection of the ITS2 region of the MTBC ( <i>M. tuberculosis</i> , <i>M. bovis</i> , <i>M. caprae</i> , <i>M. canetti</i> , <i>M. africanum</i> and <i>M. microti</i> )	FAM	VIC / HEX	100	DVEB02711
		VIC / HEX	50	DVEB02751
		CY5	100	DVEB02713
		CY5	50	DVEB02753
<b>BactoReal® Kit <i>Mycoplasma bovis</i></b> Detection of the rpoB gene of <i>M. bovis</i>	FAM	VIC / HEX	100	DVEB02511
		VIC / HEX	50	DVEB02551
		CY5	100	DVEB02513
		CY5	50	DVEB02553
<b>BactoReal® Kit <i>Mycoplasma gallisepticum</i></b> Detection of the mgc2 gene of <i>M. gallisepticum</i>	FAM	VIC / HEX	100	DVEB00311
		VIC / HEX	50	DVEB00351
		CY5	100	DVEB00313
		CY5	50	DVEB00353
<b>BactoReal® Kit <i>Mycoplasma gallisepticum</i> &amp; <i>synoviae</i></b> Detection of the mgc2 gene of <i>M. gallisepticum</i> and of the vlhA gene of <i>M. synoviae</i>	FAM + VIC / HEX	CY5	100	DVEB05713
		CY5	50	DVEB05753
<b>BactoReal® Kit <i>Mycoplasma hyopneumoniae</i></b> Detection of the rpoB gene of <i>M. hyopneumoniae</i>	FAM	VIC / HEX	100	DVEB00111
		VIC / HEX	50	DVEB00151
		CY5	100	DVEB00113
		CY5	50	DVEB00153
<b>BactoReal® Kit <i>Mycoplasma hyorhinis</i></b> Detection of the rpoB gene of <i>M. hyorhinis</i>	FAM	VIC / HEX	100	DVEB01411
		VIC / HEX	50	DVEB01451
		CY5	100	DVEB01413
		CY5	50	DVEB01453
<b>BactoReal® Kit <i>Mycoplasma suis</i></b> Detection of the 16S rRNA gene of <i>M. suis</i>	FAM	VIC / HEX	100	DVEB02611
		VIC / HEX	50	DVEB02651
		CY5	100	DVEB02613
		CY5	50	DVEB02653
<b>BactoReal® Kit <i>Mycoplasma synoviae</i></b> Detection of the vlhA gene of <i>M. synoviae</i>	FAM	VIC / HEX	100	DVEB00211
		VIC / HEX	50	DVEB00251
		CY5	100	DVEB00213
		CY5	50	DVEB00253
<b>BactoReal® Kit <i>Nocardia</i> spp.</b> Detection of the 16S rRNA gene of <i>Nocardia</i> species	FAM	VIC / HEX	100	DVEB03611
		VIC / HEX	50	DVEB03651
		CY5	100	DVEB03613
		CY5	50	DVEB03653
<b>BactoReal® Kit <i>Ornithobacterium rhinotracheale</i></b> Detection of the 16S rRNA gene of <i>O. rhinotracheale</i>	FAM	VIC / HEX	100	DVEB06611
		VIC / HEX	50	DVEB06651
		CY5	100	DVEB06613
		CY5	50	DVEB06653

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<b>BactoReal® Kit <i>Pasteurella multocida</i></b> Detection of the 16S rRNA gene of <i>Pasteurella multocida</i> (subspecies <i>P. multocida</i> , <i>P. gallicida</i> , <i>P. septica</i> , <i>P. tigris</i> )	FAM	VIC / HEX	100	DVEB02811
		VIC / HEX	50	DVEB02851
		CY5	100	DVEB02813
		CY5	50	DVEB02853
<b>BactoReal® Kit <i>Pasteurella multocida</i> toxA</b> Detection of the toxA gene of toxigenic <i>P. multocida</i> strains (PMT)	FAM	VIC / HEX	100	DVEB00911
		VIC / HEX	50	DVEB00951
		CY5	100	DVEB00913
		CY5	50	DVEB00953
<b>BactoReal® Kit <i>Pseudomonas aeruginosa</i></b> Detection of the 16S rRNA gene of <i>P. aeruginosa</i>	FAM	VIC / HEX	100	DVEB04511
		VIC / HEX	50	DVEB04551
		CY5	100	DVEB04513
		CY5	50	DVEB04553
<b>BactoReal® Kit <i>Riemerella anatipestifer</i></b> Detection of the 16S-23S ribosomal RNA intergenic spacer of <i>R. anatipestifer</i>	FAM	VIC / HEX	100	DVEB05911
		VIC / HEX	50	DVEB05951
		CY5	100	DVEB05913
		CY5	50	DVEB05953
<b>BactoReal® Kit <i>Salmonella enterica</i></b> Detection of the invA gene of <i>S. enterica</i>	FAM	VIC / HEX	100	DVEB02311
		VIC / HEX	50	DVEB02351
		CY5	100	DVEB02313
		CY5	50	DVEB02353
<b>BactoReal® Kit <i>Staphylococcus aureus</i></b> Detection of the nuc gene of <i>S. aureus</i>	FAM	VIC / HEX	100	DVEB01011
		VIC / HEX	50	DVEB01051
		CY5	100	DVEB01013
		CY5	50	DVEB01053
<b>BactoReal® Kit <i>Staphylococcus</i> spp.</b> Detection of the 23S rRNA gene of <i>Staphylococcus</i> species	FAM	VIC / HEX	100	DVEB03711
		VIC / HEX	50	DVEB03751
		CY5	100	DVEB03713
		CY5	50	DVEB03753
<b>BactoReal® Kit <i>Streptococcus agalactiae</i></b> Detection of the cfb gene of <i>S. agalactiae</i>	FAM	VIC / HEX	100	DVEB01511
		VIC / HEX	50	DVEB01551
		CY5	100	DVEB01513
		CY5	50	DVEB01553
<b>BactoReal® Kit <i>Streptococcus dysgalactiae</i></b> Detection and differentiation of 23S rRNA gene of <i>S. dysgalactiae</i> and <i>S. canis</i> and of 16S rRNA gene of <i>Streptococcus</i> species except <i>S. canis</i>	FAM + VIC / HEX	CY5	100	DVEB01713
		CY5	50	DVEB01753
<b>BactoReal® Kit <i>Streptococcus suis</i></b> Detection of the fbpS gene of <i>S. suis</i>	FAM	VIC / HEX	100	DVEB06011
		VIC / HEX	50	DVEB06051
		CY5	100	DVEB06013
		CY5	50	DVEB06053
<b>BactoReal® Kit <i>Streptococcus uberis</i></b> Detection of the ITS2 region of <i>S. uberis</i>	FAM	VIC / HEX	100	DVEB01611
		VIC / HEX	50	DVEB01651
		CY5	100	DVEB01613
		CY5	50	DVEB01653
<b>BactoReal® Kit <i>Streptococcus</i> spp.</b> Detection of the 23S rRNA gene of <i>Streptococcus</i> species	FAM	VIC / HEX	100	DVEB03811
		VIC / HEX	50	DVEB03851
		CY5	100	DVEB03813
		CY5	50	DVEB03853
<b>BactoReal® Kit <i>Taylorella equigenitalis</i></b> Detection of the 16S rRNA gene of <i>T. equigenitalis</i>	FAM	VIC / HEX	100	DVEB04611
		VIC / HEX	50	DVEB04651
		CY5	100	DVEB04613
		CY5	50	DVEB04653
<b>BactoReal® Kit <i>Trueperella pyogenes</i></b> Detection of the 16S rRNA gene of <i>T. pyogenes</i>	FAM	VIC / HEX	100	DVEB05111
		VIC / HEX	50	DVEB05151
		CY5	100	DVEB05113
		CY5	50	DVEB05153

## ParoReal Kits for detection of parasites

Product Name	Channel Pathogen	Channel IPC	Reactions	Order Number
<b>ParoReal Kit <i>Cryptosporidium parvum</i></b> Detection of the GP60 gene of <i>C. parvum</i>	FAM	VIC / HEX	100	DVEP00611
		VIC / HEX	50	DVEP00651
		CY5	100	DVEP00613
		CY5	50	DVEP00653
<b>ParoReal Kit <i>Echinococcus multilocularis</i></b> Detection of the mitochondrial ND1 gene of <i>E. multilocularis</i>	FAM	VIC / HEX	100	DVEP00111
		VIC / HEX	50	DVEP00151
		CY5	100	DVEP00113
		CY5	50	DVEP00153
<b>ParoReal Kit <i>Histomonas meleagridis</i></b> Detection of the 18S rRNA gene of <i>H. meleagridis</i>	FAM	VIC / HEX	100	DVEP00311
		VIC / HEX	50	DVEP00351
		CY5	100	DVEP00313
		CY5	50	DVEP00353
<b>ParoReal Kit <i>Neospora caninum</i></b> Detection of the mitochondrial NC5 gene of <i>N. caninum</i>	FAM	VIC / HEX	100	DVEP00511
		VIC / HEX	50	DVEP00551
		CY5	100	DVEP00513
		CY5	50	DVEP00553
<b>ParoReal Kit <i>Trichinella spiralis</i> &amp; <i>britovi</i></b> Detection and differentiation of the internal transcribed spacer of <i>Trichinella spiralis</i> and <i>T. britovi</i>	FAM + VIC / HEX	CY5	100	DVEP00413
		CY5	50	DVEP00453

## MycoReal Kits for detection of fungi

Product Name	Channel Pathogen	Channel IPC	Reactions	Order Number
<b>MycoReal Kit <i>Ascosphaera apis</i></b> <i>Coming soon</i> Detection of the ITS-1 region of <i>Ascosphaera apis</i>	FAM	VIC / HEX	100	DVEF00211
		VIC / HEX	50	DVEF00251
		CY5	100	DVEF00213
		CY5	50	DVEF00253
<b>MycoReal Kit <i>Nosema apis</i> &amp; <i>ceranae</i></b> Detection of the 18S rRNA gene of <i>Nosema apis</i> and <i>Nosema ceranae</i>	FAM + VIC / HEX	CY5	100	DVEF00113
		Cy5	50	DVEF00153
<b>MycoReal Kit <i>Batrachochytrium dendrobatidis</i></b> Detection of the ITS-1 region of <i>B. dendrobatidis</i>	FAM	VIC / HEX	100	DVEF00311
		VIC / HEX	50	DVEF00351
		CY5	100	DVEF00313
		CY5	50	DVEF00353

## ViroReal® Kits for detection of viruses

Product Name	Channel Pathogen	Channel IPC	Reactions	Order Number
<b>ViroReal® Kit African Swine Fever Virus</b> <small>NEW</small> Detection of DNA of the major capsid protein gene p72 of ASFV	FAM	VIC / HEX	100	DVEV02011
		VIC / HEX	50	DVEV02051
		CY5	100	DVEV02013
		CY5	50	DVEV02053
<b>ViroReal® Kit Bluetongue Virus</b> Detection of RNA of the segment 10 (NS3) of BTV	FAM	VIC / HEX	100	DVEV02211
		VIC / HEX	50	DVEV02251
		CY5	100	DVEV02213
		CY5	50	DVEV02253
<b>ViroReal® Kit Bovine Coronavirus</b> Detection of RNA of the N gene of BCoV	FAM	VIC / HEX	100	DVEV00911
		VIC / HEX	50	DVEV00951
		CY5	100	DVEV00913
		CY5	50	DVEV00953
<b>ViroReal® Kit Bovine Herpesvirus 1</b> Detection of DNA of the UL27 gene of BoHV1 causing IBR and IPV	FAM	VIC / HEX	100	DVEV02911
		VIC / HEX	50	DVEV02951
		CY5	100	DVEV02913
		CY5	50	DVEV02953
<b>ViroReal® Kit Bovine Nebovirus</b> Detection of RNA of the ORF1 of bovine nebovirus	FAM	VIC / HEX	100	DVEV02711
		VIC / HEX	50	DVEV02751
		CY5	100	DVEV02713
		CY5	50	DVEV02753
<b>ViroReal® Kit Bovine Norovirus</b> Detection of RNA of the ORF1 of bovine norovirus genotypes GI.1.1 and GI.1.2	FAM	VIC / HEX	100	DVEV02611
		VIC / HEX	50	DVEV02651
		CY5	100	DVEV02613
		CY5	50	DVEV02653
<b>ViroReal® Kit Bovine Parainfluenza Virus 3</b> Detection of RNA of the phosphoprotein P gene of PI3 genotypes A, B and C	FAM	VIC / HEX	100	DVEV02811
		VIC / HEX	50	DVEV02851
		CY5	100	DVEV02813
		CY5	50	DVEV02853
<b>ViroReal® Kit Bovine Torovirus</b> Detection of RNA of the M gene of BToV	FAM	VIC / HEX	100	DVEV01611
		VIC / HEX	50	DVEV01651
		CY5	100	DVEV01613
		CY5	50	DVEV01653
<b>ViroReal® Kit BRSV</b> Detection of RNA of the N protein gene of bovine respiratory syncytial virus	FAM	VIC / HEX	100	DVEV02411
		VIC / HEX	50	DVEV02451
		CY5	100	DVEV02413
		CY5	50	DVEV02453
<b>ViroReal® Kit BVD Virus</b> Detection of RNA of the 5'UTR of bovine viral diarrhea virus (BVDV-1, BVDV-2 and BVDV-3) and of some strains of the classical swine fever virus (CSFV) and border disease virus of sheep (BDV)	FAM	CY5	100	DVEV00613
		CY5	50	DVEV00653
<b>Expansion primer for Border Disease Virus</b> Expansion primers for the detection of BDV of sheep. Only for use in combination with ViroReal® Kit BVD Virus				ADD01
<b>Expansion primer for CSFV like pestivirus</b> Expansion primers for the detection of classical swine fever virus like pestivirus. Only for use in combination with ViroReal® Kit BVD Virus				ADD02
<b>ViroReal® Kit CAEV</b> <small>Coming soon</small> Detection of RNA of the gag polyprotein gene of caprine arthritis encephalitis virus (CAEV)	FAM	VIC / HEX	100	DVEV03411
		VIC / HEX	50	DVEV03451
		CY5	100	DVEV03413
		CY5	50	DVEV03453
<b>ViroReal® Kit CSF Virus</b> Detection of RNA of the 3'UTR of classical swine fever virus (KSPV)	FAM	VIC / HEX	100	DVEV02311
		VIC / HEX	50	DVEV02351
		CY5	100	DVEV02313
		CY5	50	DVEV02353



Product Name	Channel Pathogen	Channel IPC	Reactions	Order Number
<b>ViroReal® Kit EMCV</b> Detection of RNA of the 3'UTR of encephalomyocarditis virus	FAM	VIC / HEX	100	DVEV01011
		VIC / HEX	50	DVEV01051
		CY5	100	DVEV01013
		CY5	50	DVEV01053
<b>ViroReal® Kit Lumpy Skin Disease Virus</b> Detection of DNA of the GPCR gene of Lumpy Skin Disease Virus (LSDV)	FAM	VIC / HEX	100	DVEV03311
		VIC / HEX	50	DVEV03351
		CY5	100	DVEV03313
		CY5	50	DVEV03353
<b>ViroReal® Kit Maedi-Visna Virus</b> <i>Coming soon</i> Detection of RNA of the gag polyprotein of Maedi-Visna Virus (MVV)	FAM	VIC / HEX	100	DVEV03511
		VIC / HEX	50	DVEV03551
		CY5	100	DVEV03513
		CY5	50	DVEV03553
<b>ViroReal® Kit MERS-CoV</b> Detection of RNA of the N gene of Middle East Respiratory Syndrome Coronavirus	VIC / HEX	CY5	100	DVEV03013
		CY5	50	DVEV03053
<b>ViroReal® Kit PCV2</b> Detection of the ORF1 of porcine circovirus type 2 including the three genotypes A, B and C. A quantitative real-time PCR standard can be ordered separately (order no. PC100).	FAM	VIC / HEX	100	DVEV00511
		VIC / HEX	50	DVEV00551
		CY5	100	DVEV00513
		CY5	50	DVEV00553
<b>ViroReal® Kit PCV3</b> <i>Coming soon</i> Detection of the capsid protein gene of the porcine circovirus type 3 (PCV3)	FAM	VIC / HEX	100	DVEV03611
		VIC / HEX	50	DVEV03651
		CY5	100	DVEV03613
		CY5	50	DVEV03653
<b>ViroReal® Kit PCMV</b> Detection of the DPOL gene of porcine cytomegalovirus	FAM	VIC / HEX	100	DVEV01111
		VIC / HEX	50	DVEV01151
		CY5	100	DVEV01113
		CY5	50	DVEV01153
<b>ViroReal® Kit PEDV</b> Detection of RNA of the N gene of porcine epidemic diarrhea virus	FAM	CY5	100	DVEV01313
		CY5	50	DVEV01353
<b>ViroReal® Kit PEDV &amp; SDCV</b> Detection and differentiation of RNA of the N gene of porcine epidemic diarrhea virus and of the 3'UTR of swine delta coronavirus (PDCoV)	FAM + VIC / HEX	CY5	100	DVEV01913
		CY5	50	DVEV01953
<b>ViroReal® Kit PEDV &amp; TGEV</b> Detection and differentiation of RNA of the N gene of porcine epidemic diarrhea virus and of the S region of transmissible gastroenteritis virus	FAM + VIC / HEX	CY5	100	DVEV01413
		CY5	50	DVEV01453
<b>ViroReal® Kit PHEV</b> Detection of RNA of the N gene of porcine hemagglutinating encephalomyelitis virus	FAM	VIC / HEX	100	DVEV01511
		VIC / HEX	50	DVEV01551
		CY5	100	DVEV01513
		CY5	50	DVEV01553
<b>ViroReal® Kit Porcine Parvovirus</b> Detection of the NS1 gene of PPV	FAM	VIC / HEX	100	DVEV00711
		VIC / HEX	50	DVEV00751
		CY5	100	DVEV00713
		CY5	50	DVEV00753
<b>ViroReal® Kit PRRS Virus EU &amp; NA 1.1</b> Detection and differentiation of RNA of the ORF 7 / 3' UTR of porcine reproductive and respiratory syndrome virus lineages EU & NA	FAM + VIC / HEX	CY5	100	DVEV00113
		Cy5	50	DVEV00153
<b>ViroReal® Kit Pseudorabiesvirus (SHV-1)</b> Detection of the glycoprotein B gene of pseudorabiesvirus (suid herpesvirus 1, aujeszky's disease virus)	FAM	VIC / HEX	100	DVEV02511
		VIC / HEX	50	DVEV02551
		CY5	100	DVEV02513
		CY5	50	DVEV02553
<b>ViroReal® Kit Rabies Virus</b> Detection of RNA of the N gene of RABV	FAM	VIC / HEX	100	DVEV00811
		VIC / HEX	50	DVEV00851
		CY5	100	DVEV00813
		CY5	50	DVEV00853

Product Name	Channel Pathogen	Channel IPC	Reactions	Order Number
<b>ViroReal® Kit RHDV</b> Detection of RNA of the vp60 gene of rabbit haemorrhagic disease virus 1&2	FAM	VIC / HEX	100	DVEV03111
		VIC / HEX	50	DVEV03151
		CY5	100	DVEV03113
		CY5	50	DVEV03153
<b>ViroReal® 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	VIC / HEX	100	DVEV01711
		VIC / HEX	50	DVEV01751
		CY5	100	DVEV01713
		CY5	50	DVEV01753
<b>ViroReal® Kit Sacbrood Virus</b> <i>Coming soon</i> Detection of RNA of the polyprotein gene of sacbrood virus (SBV)	FAM	VIC / HEX	100	DVEV02111
		VIC / HEX	50	DVEV02151
		CY5	100	DVEV02113
		CY5	50	DVEV02153
<b>ViroReal® Kit Schmallenberg Virus</b> Detection of RNA of the nucleocapsid protein gene of schmallenberg virus (SBV)	FAM	VIC / HEX	100	DVEV03211
		VIC / HEX	50	DVEV03251
		CY5	100	DVEV03213
		CY5	50	DVEV03253
<b>ViroReal® Kit Swine Delta Coronavirus</b> Detection of RNA of the 3'UTR of SDCV (PDCoV)	VIC / HEX	Cy5	100	DVEV01813
		Cy5	50	DVEV01853
<b>ViroReal® Kit Swine Influenza A (SIV)</b> Detection of RNA of the matrix protein gene of influenza A virus	FAM	VIC / HEX	100	DVEV00411
		VIC / HEX	50	DVEV00451
		CY5	100	DVEV00413
		CY5	50	DVEV00453
<b>ViroReal® Kit TGEV</b> Detection of RNA of the S region of transmissible gastroenteritis virus	VIC / HEX	CY5	100	DVEV01213
		CY5	50	DVEV01253

## General information

### Kit content:

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

### Validated PCR-platforms:

- Applied Biosystems® 7500 instrument (Thermo Fisher Scientific)
- LightCycler® 480 (Roche)
- Mx3005P® QPCR System (Agilent)





## Positive control standards

Product Name	Order Number
<b>BactoReal® <i>Lawsonia intracellularis</i> Standard</b> Contains a fragment of <i>L. intracellularis</i> DNA at a concentration of 10 <sup>7</sup> copies/μl. Only for use with BactoReal® Kit <i>Lawsonia intracellularis</i>	PC200
<b>BactoReal® <i>Mycoplasma hyopneumoniae</i> Standard</b> Contains a fragment of <i>M. hyopneumoniae</i> DNA at a concentration of 10 <sup>7</sup> copies/μl. Only for use with BactoReal® Kit <i>Mycoplasma hyopneumoniae</i>	PC300
<b>BactoReal® <i>Brachyspira hyodysenteriae</i> Standard</b> Contains a fragment of <i>B. hyodysenteriae</i> DNA at a concentration of 10 <sup>7</sup> copies/μl. Only for use with BactoReal® Kit <i>Brachyspira hyodysenteriae</i>	PC400
<b>BactoReal® <i>Brachyspira pilosicoli</i> Standard</b> Contains a fragment of <i>B. pilosicoli</i> DNA at a concentration of 10 <sup>7</sup> copies/μl. Only for use with BactoReal® Kit <i>Brachyspira pilosicoli</i>	PC500
<b>BactoReal® <i>Pseudomonas aeruginosa</i> 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® <i>Salmonella enterica</i> 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
<b>BactoReal® <i>Staphylococcus</i> spp. Standard</b> Contains a fragment of <i>Staphylococcus</i> DNA at a concentration of 10 <sup>7</sup> copies/μl. Only for use with BactoReal® Kit <i>Staphylococcus</i> spp.	PC800
<b>ParoReal <i>Histomonas meleagridis</i> Standard</b> Contains a fragment of <i>H. meleagridis</i> DNA at a concentration of 10 <sup>7</sup> copies/μl. Only for use with ParoReal Kit <i>Histomonas meleagridis</i>	PC700
<b>ViroReal® Porcine circovirus type 2 (PCV2) Standard</b> Contains a fragment of PCV2 DNA at a concentration of 10 <sup>7</sup> copies/μl. Only for use with ViroReal® Kit PCV2	PC100

## BactoTyping for typing of bacteria

Product Name	Channel Pathogen	Order Number
<b>BactoType <i>E. coli</i></b> <i>Coming soon</i> Detection of porcine <i>E. coli</i> virulence-associated genes. Typing of <i>E. coli</i> via melting curves.	SYBR® Green Filter	DVET001

## ViroTyping for typing of viruses

Product Name	Channel Pathogen	Order Number
<b>ViroType PCV2 a, b, d</b> <i>Coming soon</i> Detection of the ORF2 of PCV2. Typing of PCV2a, b, d via SYBR® Green amplification curves.	SYBR® Green Filter	RTGV100GT

## 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

**ViroReal®, BactoReal®, MycoReal and ParoReal Kits run with the same thermal cycling conditions.**

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