Veterinary Diagnostics

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BactoReal® Kits for detection of bacteria

Product Name	Channel Pathogen	Channel IPC	Reactions	Order Number
BactoReal® Kit _Actinobacillus pleuropneumoniae_ Detection of the apxIVA gene of _A. pleuropneumoniae_	FAM	VIC / HEX	100	DVEB02011
		VIC / HEX	50	DVEB02051
		CY5	100	DVEB02013
		CY5	50	DVEB02053
BactoReal® Kit _Aerococcus viridans_ Detection of the 16S rRNA gene of _A. viridans_	FAM	VIC / HEX	100	DVEB05311
		VIC / HEX	50	DVEB05351
		CY5	100	DVEB05313
		CY5	50	DVEB05353
BactoReal® Kit American Foulbrood 1.1 Detection of the 16S rRNA gene of _Paenibacillus larvae_	FAM	VIC / HEX	100	DVEB05411
		VIC / HEX	50	DVEB05451
		CY5	100	DVEB05413
		CY5	50	DVEB05453
BactoReal® Kit _Bartonella_ spp. Detection of the gltA gene of _B. clarridgeiae, B. elizabethae, B. grahamii, B. henselae, B. koehlerae, B. quintana, B. volans_ and _B. washoensis_	FAM	VIC / HEX	100	DVEB03911
		VIC / HEX	50	DVEB03951
		CY5	100	DVEB03913
		CY5	50	DVEB03953
BactoReal® Kit _Bordetella bronchiseptica_ Detection of the bfrA gene of _B. bronchiseptica_	FAM	VIC / HEX	100	DVEB02411
		VIC / HEX	50	DVEB02451
		CY5	100	DVEB02413
		CY5	50	DVEB02453
BactoReal® Kit _Borrelia burgdorferi_ sensu lato Detection of the ospA gene of _Borrelia_ species belonging to the _Borrelia burgdorferi_ sensu lato complex (_B. spielmanii_ is not well detected)	FAM	VIC / HEX	100	DVEB05011
		VIC / HEX	50	DVEB05051
		CY5	100	DVEB05013
		CY5	50	DVEB05053
BactoReal® Kit _Brachyspira hyo/pilo_ Combined detection of the nox gene of _B. hyodysenteriae_ and _B. pilosicoli._ No differentiation between species.	FAM	VIC / HEX	100	DVEB01811
		VIC / HEX	50	DVEB01851
		CY5	100	DVEB01813
		CY5	50	DVEB01853
BactoReal® Kit _Brachyspira hyodysenteriae_ Detection of the nox gene of _B. hyodysenteriae_	FAM	VIC / HEX	100	DVEB01111
		VIC / HEX	50	DVEB01151
		CY5	100	DVEB01113
		CY5	50	DVEB01153
BactoReal® Kit _Brachyspira pilosicoli_ Detection of the nox gene of _B. pilosicoli_	FAM	VIC / HEX	100	DVEB01211
		VIC / HEX	50	DVEB01251
		CY5	100	DVEB01213
		CY5	50	DVEB01253
BactoReal® Kit _Brucella_ spp. Detection of the IS711 region of _B. abortus, B. ovis, B. melitensis, B. suis_ and _B. canis_	FAM	VIC / HEX	100	DVEB02111
		VIC / HEX	50	DVEB02151
		CY5	100	DVEB02113
		CY5	50	DVEB02153
BactoReal® Kit _Chlamydiaceae_ Detection of the 23S rRNA gene of _C. muridarum, C. suis, C. trachomatis, C. abortus, C. caviae, C. felis, C. pecorum, C. pneumoniae_ and _C. psittaci_	FAM	VIC / HEX	100	DVEB03111
		VIC / HEX	50	DVEB03151
		CY5	100	DVEB03113
		CY5	50	DVEB03153

Product Name	Channel Pathogen	Channel IPC	Reactions	Order Number
BactoReal® Kit *Chlamydophila psittaci/abortus* Detection of the omp1 gene of *C. abortus* and *C. psittaci*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB03011 DVEB03051 DVEB03013 DVEB03053
BactoReal® Kit *Clostridium difficile* Detection of the toxin A (tcdA) gene and toxin B (tcdB) gene of *C. difficile*	FAM + VIC / HEX	CY5 CY5	100 50	DVEB04213 DVEB04253
BactoReal® Kit *Clostridium perfringens* Detection of the 16S rRNA gene of *C. perfringens*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB06511 DVEB06551 DVEB06513 DVEB06553
BactoReal® Kit *Corynebacterium pseudotuberculosis* Detection of the pld gene of *C. pseudotuberculosis*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB05211 DVEB05251 DVEB05213 DVEB05253
BactoReal® Kit *Coxiella burnetii* Detection of the IS1111 insertion sequence of *C. burnetii*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB05811 DVEB05851 DVEB05813 DVEB05853
BactoReal® Kit *Enterococcus* spp. Detection of the 23S rRNA gene of *Enterococcus* species	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB03411 DVEB03451 DVEB03413 DVEB03453
BactoReal® Kit *Escherichia coli* Detection of the dxs gene of *E. coli* and *Shigella*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB01911 DVEB01951 DVEB01913 DVEB01953
BactoReal® Kit *E. coli* Typing stx1 & stx2 (STEC) Detection of virulence-associated genes stx1 and stx2 (verotoxin) of *E. coli*	FAM + VIC / HEX	CY5 CY5	100 50	DVEB04013 DVEB04053
BactoReal® Kit *E. coli* Typing eae & ehxA (EHEC, EPEC) Detection of virulence-associated genes eae (intimin) and ehxA (enterohemolysin) of *E. coli*	FAM + VIC / HEX	CY5 CY5	100 50	DVEB04113 DVEB04153
BactoReal® Kit *E. coli* Typing eae (EHEC or EPEC) Detection of virulence-associated gene eae (intimin) of *E. coli*	FAM	CY5 CY5	100 50	DVEB04313 DVEB04353
BactoReal® Kit *E. coli* Typing ehxA (EHEC) Detection of virulence-associated gene ehxA (enterohemolysin) of *E. coli*	VIC / HEX	CY5 CY5	100 50	DVEB04413 DVEB04453
BactoReal® Kit European Foulbrood Detection of the 16S rRNA gene of *Melissococcus plutonius*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB05511 DVEB05551 DVEB05513 DVEB05553
BactoReal® Kit *Haemophilus parasuis* Detection of the 16S rRNA gene of *H. parasuis*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB00411 DVEB00451 DVEB00413 DVEB00453
BactoReal® Kit *Histophilus somni* ^New Detection of the 16S rRNA gene of *H. somni*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB06111 DVEB06151 DVEB06113 DVEB06153
BactoReal® Kit *Klebsiella pneumoniae* ^New Detection of the hemolysin gene of *K. pneumoniae*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB06711 DVEB06751 DVEB06713 DVEB06753

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BactoReal® Kit *Lawsonia intracellularis* Detection of the 16S rRNA gene of *L. intracellularis*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB01311 DVEB01351 DVEB01313 DVEB01353
BactoReal® Kit *Leptospira* spp. (16S rDNA) Detection of the 16S rRNA gene of pathogenic and intermediately pathogenic *Leptospira* species	VIC / HEX	Cy5 Cy5	100 50	DVEB00513 DVEB00553
BactoReal® Kit *Leptospira* spp. (LipL32) Detection of the LipL32 gene of pathogenic *Leptospira* species	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB00611 DVEB00651 DVEB00613 DVEB00653
BactoReal® Kit *Leptospira* spp. Multiplex (16S+LipL32) Detection and differentiation of LipL32 gene of pathogenic and 16S rRNA gene of pathogenic and intermediately pathogenic *Leptospira* species	FAM + VIC / HEX	Cy5 Cy5	100 50	DVEB00713 DVEB00753
BactoReal® Kit *Listeria monocytogenes* Detection of the hlyA gene of *L. monocytogenes*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB00811 DVEB00851 DVEB00813 DVEB00853
BactoReal® Kit *Mannheimia haemolytica* Detection of the 16S rRNA gene of *M. haemolytica*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB02911 DVEB02951 DVEB02913 DVEB02953
BactoReal® Kit *Mycobacterium avium* ssp. *paratuberculosis* Detection of the IS900 region of *M. avium* subspecies *paratuberculosis*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB02211 DVEB02251 DVEB02213 DVEB02253
BactoReal® Kit *Mycobacterium tuberculosis* complex Detection of the ITS2 region of the MTBC (*M. tuberculosis, M. bovis, M. caprae, M. canetti, M. africanum* and *M. microti*)	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB02711 DVEB02751 DVEB02713 DVEB02753
BactoReal® Kit *Mycoplasma bovis* Detection of the rpoB gene of *M. bovis*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB02511 DVEB02551 DVEB02513 DVEB02553
BactoReal® Kit *Mycoplasma gallisepticum* Detection of the mgc2 gene of *M. gallisepticum*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB00311 DVEB00351 DVEB00313 DVEB00353
BactoReal® Kit *Mycoplasma gallisepticum & synoviae* Detection of the mgc2 gene of *M. gallisepticum* and of the vlhA gene of *M. synoviae*	FAM + VIC / HEX	CY5 CY5	100 50	DVEB05713 DVEB05753
BactoReal® Kit *Mycoplasma hyopneumoniae* Detection of the rpoB gene of *M. hyopneumoniae*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB00111 DVEB00151 DVEB00113 DVEB00153
BactoReal® Kit *Mycoplasma hyorhinis* Detection of the rpoB gene of *M. hyorhinis*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB01411 DVEB01451 DVEB01413 DVEB01453
BactoReal® Kit *Mycoplasma suis* Detection of the 16S rRNA gene of *M. suis*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB02611 DVEB02651 DVEB02613 DVEB02653
BactoReal® Kit *Mycoplasma synoviae* Detection of the vlhA gene of *M. synoviae*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEB00211 DVEB00251 DVEB00213 DVEB00253

Product Name	Channel Pathogen	Channel IPC	Reactions	Order Number
BactoReal® Kit *Nocardia* spp. Detection of the 16S rRNA gene of *Nocardia* species	FAM	VIC / HEX	100	DVEB03611
		VIC / HEX	50	DVEB03651
		CY5	100	DVEB03613
		CY5	50	DVEB03653
BactoReal® Kit *Ornithobacterium rhinotracheale* Detection of the 16S rRNA gene of *O. rhinotracheale*	FAM	VIC / HEX	100	DVEB06611
		VIC / HEX	50	DVEB06651
		CY5	100	DVEB06613
		CY5	50	DVEB06653
BactoReal® Kit *Pasteurella multocida* Detection of the 16S rRNA gene of *Pasteurella multocida* (subspecies P. *multocida*, *P. gallicida*, *P. septica*, P. *tigris*)	FAM	VIC / HEX	100	DVEB02811
		VIC / HEX	50	DVEB02851
		CY5	100	DVEB02813
		CY5	50	DVEB02853
BactoReal® Kit *Pasteurella multocida* toxA Detection of the toxA gene of toxigenic *P. multocida* strains (PMT)	FAM	VIC / HEX	100	DVEB00911
		VIC / HEX	50	DVEB00951
		CY5	100	DVEB00913
		CY5	50	DVEB00953
BactoReal® Kit *Pseudomonas aeruginosa* Detection of the 16S rRNA gene of *P. aeruginosa*	FAM	VIC / HEX	100	DVEB04511
		VIC / HEX	50	DVEB04551
		CY5	100	DVEB04513
		CY5	50	DVEB04553
BactoReal® Kit *Riemerella anatipestifer* Detection of the 16S-23S ribosomal RNA intergenic spacer of *R. anatipestifer*	FAM	VIC / HEX	100	DVEB05911
		VIC / HEX	50	DVEB05951
		CY5	100	DVEB05913
		CY5	50	DVEB05953
BactoReal® Kit *Salmonella enterica* Detection of the invA gene of *S. enterica*	FAM	VIC / HEX	100	DVEB02311
		VIC / HEX	50	DVEB02351
		CY5	100	DVEB02313
		CY5	50	DVEB02353
BactoReal® Kit *Staphylococcus aureus* Detection of the nuc gene of *S. aureus*	FAM	VIC / HEX	100	DVEB01011
		VIC / HEX	50	DVEB01051
		CY5	100	DVEB01013
		CY5	50	DVEB01053
BactoReal® Kit *Staphylococcus* spp. Detection of the 23S rRNA gene of *Staphylococcus* species	FAM	VIC / HEX	100	DVEB03711
		VIC / HEX	50	DVEB03751
		CY5	100	DVEB03713
		CY5	50	DVEB03753
BactoReal® Kit *Streptococcus agalactiae* Detection of the cfb gene of *S. agalactiae*	FAM	VIC / HEX	100	DVEB01511
		VIC / HEX	50	DVEB01551
		CY5	100	DVEB01513
		CY5	50	DVEB01553
BactoReal® Kit *Streptococcus dysgalactiae* Detection and differentiation of 23S rRNA gene of *S. dysgalactiae* and *S. canis* and of 16S rRNA gene of *Streptococcus* species except *S. canis*	FAM + VIC / HEX	CY5	100	DVEB01713
		CY5	50	DVEB01753
BactoReal® Kit *Streptococcus suis* Detection of the fbpS gene of *S. suis*	FAM	VIC / HEX	100	DVEB06011
		VIC / HEX	50	DVEB06051
		CY5	100	DVEB06013
		CY5	50	DVEB06053
BactoReal® Kit *Streptococcus uberis* Detection of the ITS2 region of *S. uberis*	FAM	VIC / HEX	100	DVEB01611
		VIC / HEX	50	DVEB01651
		CY5	100	DVEB01613
		CY5	50	DVEB01653
BactoReal® Kit *Streptococcus* spp. Detection of the 23S rRNA gene of *Streptococcus* species	FAM	VIC / HEX	100	DVEB03811
		VIC / HEX	50	DVEB03851
		CY5	100	DVEB03813
		CY5	50	DVEB03853

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BactoReal® Kit *Taylorella equigenitalis* Detection of the 16S rRNA gene of *T. equigenitalis*	FAM	VIC / HEX	100	DVEB04611
		VIC / HEX	50	DVEB04651
		CY5	100	DVEB04613
		CY5	50	DVEB04653
BactoReal® Kit *Trueperella pyogenes* Detection of the 16S rRNA gene of *T. pyogenes*	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
ParoReal Kit *Cryptosporidium parvum* Detection of the GP60 gene of *C. parvum*	FAM	VIC / HEX	100	DVEP00611
		VIC / HEX	50	DVEP00651
		CY5	100	DVEP00613
		CY5	50	DVEP00653
ParoReal Kit *Echinococcus multilocularis* Detection of the mitochondrial ND1 gene of *E. multilocularis*	FAM	VIC / HEX	100	DVEP00111
		VIC / HEX	50	DVEP00151
		CY5	100	DVEP00113
		CY5	50	DVEP00153
ParoReal Kit *Histomonas meleagridis* Detection of the 18S rRNA gene of *H. meleagridis*	FAM	VIC / HEX	100	DVEP00311
		VIC / HEX	50	DVEP00351
		CY5	100	DVEP00313
		CY5	50	DVEP00353
ParoReal Kit *Neospora caninum* Detection of the mitochondrial NC5 gene of *N. caninum*	FAM	VIC / HEX	100	DVEP00511
		VIC / HEX	50	DVEP00551
		CY5	100	DVEP00513
		CY5	50	DVEP00553
ParoReal Kit *Trichinella spiralis & britovi* Detection and differentiation of the internal transcribed spacer of *Trichinella spiralis* and *T. britovi*	FAM + VIC / HEX	CY5	100	DVEP00413
		CY5	50	DVEP00453

MycoReal Kits for detection of fungi

Product Name	Channel Pathogen	Channel IPC	Reactions	Order Number
MycoReal Kit *Ascosphaera apis* Detection of the ITS-1 region of *Ascosphaera apis*	FAM	VIC / HEX	100	DVEF00211
		VIC / HEX	50	DVEF00251
		CY5	100	DVEF00213
		CY5	50	DVEF00253
MycoReal Kit *Nosema apis & ceranae* Detection of the 18S rRNA gene of *Nosema apis* and *Nosema ceranae*	FAM + VIC / HEX	CY5	100	DVEF00113
		Cy5	50	DVEF00153
MycoReal Kit *Batrachochytrium dendrobatidis* Detection of the ITS-1 region of *B.dendrobatidis*	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
ViroReal® Kit African Swine Fever Virus (FLI approved) Detection of DNA of the major capsid protein gene p72 of ASFV	FAM	CY5	100	DVEV02013
		CY5	50	DVEV02053
ViroReal® Kit Bluetongue Virus 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
ViroReal® Kit Bovine Coronavirus Detection of RNA of the N gene of BCoV	FAM	VIC / HEX	100	DVEV00911
		VIC / HEX	50	DVEV00951
		CY5	100	DVEV00913
		CY5	50	DVEV00953
ViroReal® Kit Bovine Herpesvirus 1 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
ViroReal® Kit Bovine Nebovirus Detection of RNA of the ORF1 of bovine nebovirus	FAM	VIC / HEX	100	DVEV02711
		VIC / HEX	50	DVEV02751
		CY5	100	DVEV02713
		CY5	50	DVEV02753
ViroReal® Kit Bovine Norovirus Detection of RNA of the ORF1 of bovine norovirus genotypes GIII.1 and GIII.2	FAM	VIC / HEX	100	DVEV02611
		VIC / HEX	50	DVEV02651
		CY5	100	DVEV02613
		CY5	50	DVEV02653
ViroReal® Kit Bovine Parainfluenza Virus 3 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
ViroReal® Kit Bovine Torovirus Detection of RNA of the M gene of BToV	FAM	VIC / HEX	100	DVEV01611
		VIC / HEX	50	DVEV01651
		CY5	100	DVEV01613
		CY5	50	DVEV01653
ViroReal® Kit BRSV 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
ViroReal® Kit BVD Virus (FLI approved) 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
Expansion primer for Border Disease Virus Expansion primers for the detection of BDV of sheep. Only for use in combination with ViroReal® Kit BVD Virus				ADD01
Expansion primer for CSFV like pestivirus Expansion primers for the detection of classical swine fever virus like pestivirus. Only for use in combination with ViroReal® Kit BVD Virus				ADD02
ViroReal® Kit CAEV 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
ViroReal® Kit CSF Virus Detection of RNA of the 3´UTR of classical swine fewer virus (KSPV)	FAM	VIC / HEX	100	DVEV02311
		VIC / HEX	50	DVEV02351
		CY5	100	DVEV02313
		CY5	50	DVEV02353

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ViroReal® Kit EMCV *Detection of RNA of the 3´UTR of encephalomyocarditis virus*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEV01011 DVEV01051 DVEV01013 DVEV01053
ViroReal® Kit Lumpy Skin Disease Virus *Detection of DNA of the GPCR gene of Lumpy Skin Disease Virus (LSDV)*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEV03311 DVEV03351 DVEV03313 DVEV03353
ViroReal® Kit Maedi-Visna Virus *Detection of RNA of the gag polyprotein of Maedi-Visna Virus (MVV)*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEV03511 DVEV03551 DVEV03513 DVEV03553
ViroReal® Kit MERS-CoV *Detection of RNA of the N gene of Middle East Respiratory Syndrome Coronavirus*	VIC / HEX	CY5 CY5	100 50	DVEV03013 DVEV03053
ViroReal® Kit PCV2 *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 VIC / HEX CY5 CY5	100 50 100 50	DVEV00511 DVEV00551 DVEV00513 DVEV00553
ViroReal® Kit PCV3 *Detection of the capsid protein gene of the porcine circovirus type 3 (PCV3)*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEV03611 DVEV03651 DVEV03613 DVEV03653
ViroReal® Kit PCMV *Detection of the DPOL gene of porcine cytomegalovirus*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEV01111 DVEV01151 DVEV01113 DVEV01153
ViroReal® Kit PEDV *Detection of RNA of the N gene of porcine epidemic diarrhea virus*	FAM	CY5 CY5	100 50	DVEV01313 DVEV01353
ViroReal® Kit PEDV & SDCV *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 CY5	100 50	DVEV01913 DVEV01953
ViroReal® Kit PEDV & TGEV *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 CY5	100 50	DVEV01413 DVEV01453
ViroReal® Kit PHEV *Detection of RNA of the N gene of porcine hemagglutinating encephalomyelitis virus*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEV01511 DVEV01551 DVEV01513 DVEV01553
ViroReal® Kit Porcine Parvovirus *Detection of the NS1 gene of PPV*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEV00711 DVEV00751 DVEV00713 DVEV00753
ViroReal® Kit PRRS Virus EU & NA 1.1 *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 Cy5	100 50	DVEV00113 DVEV00153
ViroReal® Kit Pseudorabiesvirus (SHV-1) *Detection of the glycoprotein B gene of pseudorabiesvirus (suid herpesvirus 1, aujeszk´s disease virus)*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEV02511 DVEV02551 DVEV02513 DVEV02553
ViroReal® Kit Rabies Virus *Detection of RNA of the N gene of RABV*	FAM	VIC / HEX VIC / HEX CY5 CY5	100 50 100 50	DVEV00811 DVEV00851 DVEV00813 DVEV00853

Veterinary Diagnostics

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Product Name	Channel Pathogen	Channel IPC	Reactions	Order Number
ViroReal® Kit RHDV 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
ViroReal® Kit Rotavirus 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
ViroReal® Kit Sacbrood Virus 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
ViroReal® Kit Schmallenberg Virus 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
ViroReal® Kit Swine Delta Coronavirus Detection of RNA of the 3'UTR of SDCV (PDCoV)	VIC / HEX	Cy5	100	DVEV01813
		Cy5	50	DVEV01853
ViroReal® Kit Swine Influenza A (SIV) 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
ViroReal® Kit TGEV 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)
- 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

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

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

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Positive control standards

Product Name	Order Number
BactoReal® Lawsonia intracellularis Standard Contains a fragment of *L. intracellularis* DNA at a concentration of 10^7 copies/µl. Only for use with BactoReal® Kit *Lawsonia intracellularis*	PC200
BactoReal® Mycoplasma hyopneumoniae Standard Contains a fragment of *M. hyopneumoniae* DNA at a concentration of 10^7 copies/µl. Only for use with BactoReal® Kit *Mycoplasma hyopneumoniae*	PC300
BactoReal® Brachyspira hyodysenteriae Standard Contains a fragment of *B. hyodysenteriae* DNA at a concentration of 10^7 copies/µl. Only for use with BactoReal® Kit *Brachyspira hyodysenteriae*	PC400
BactoReal® Brachyspira pilosicoli Standard Contains a fragment of *B. pilosicoli* DNA at a concentration of 10^7 copies/µl. Only for use with BactoReal® Kit *Brachyspira pilosicoli*	PC500
BactoReal® Pseudomonas aeruginosa Standard Contains a fragment of *P. aeruginosa* DNA at a concentration of 10^7 copies/µl. Only for use with BactoReal® Kit *Pseudomonas aeruginosa*	PC900
BactoReal® Salmonella enteria Standard Contains a fragment of *S. enterica* DNA at a concentration of 10^7 copies/µl. Only for use with BactoReal® Kit *Salmonella enterica*	PC600
BactoReal® Staphylococcus spp. Standard Contains a fragment of *Staphylococcus* DNA at a concentration of 10^7 copies/µl. Only for use with BactoReal® Kit *Staphylococcus* spp.	PC800
ParoReal Histomonas meleagridis Standard Contains a fragment of *H. meleagridis* DNA at a concentration of 10^7 copies/µl. Only for use with ParoReal Kit *Histomonas meleagridis*	PC700
ViroReal® Porcine circovirus type 2 (PCV2) Standard Contains a fragment of PCV2 DNA at a concentration of 10^7 copies/µl. Only for use with ViroReal® Kit PCV2	PC100
MycoReal Nosema apis Standard New Contains a fragment of *Nosema apis* DNA at a concentration of 10^7 copies/µl. Only for use with MycoReal Kit *Nosema apis & ceranae*	PC1000
MycoReal Nosema ceranae Standard New Contains a fragment of *Nosema ceranae* DNA at a concentration of 10^7 copies/µl. Only for use with MycoReal Kit *Nosema apis & ceranae*	PC1001

BactoTyping for typing of bacteria

Product Name	Channel Pathogen	Order Number
BactoTyping Kit E. coli Detection of porcine *E. coli* virulence-associated genes (F4, F5, F6, F18, F41, STa1, STb2, LT, Stx2e, EAST1, fimA, AIDA-I, pAA, escV, cbf1, iucD, papC, pic). Typing of *E. coli* via melting curves.	SYBR ® Green Filter	DVET001
BactoTyping Kit GTB - Staphylococcus aureus New Detection of lucE point mutation, *sea, sed.* Typing with probes (FAM, VIC)	FAM, VIC	DVET004

Assays for detection of internal positive control
For use with ingenetix assays or customer assays

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