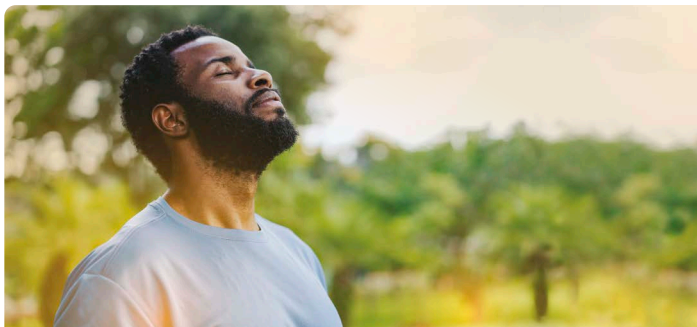


PRIMER
DESIGN



genesig[®] qPCR Test Kits

Human Healthcare
Animal and Veterinary
Food, Water and Agriculture

Convenient Kit Formats

Pathogen Detection	Easy Kit	Standard Kit	Advanced Kit	genesigPlex Kit	genesig® Complete
qPCR Platform Compatibility	genesig® q16/q32	genesig® q16/q32 Open platform	genesig® q16/q32 Open platform	genesig® q32 Open platform	genesig® q16/q32 Open platform
Multiplex qPCR	-	-	Single channel only	Yes	Single channel only
Target Primer and Probe Mix	Yes	Yes	Yes	Yes	Yes
Positive Control Included	Yes	Yes	Yes	Yes	Yes
Negative Control Required	Yes	Yes	Yes	Yes	Yes
Internal Extraction Control (IEC) Primer and Probe Mix	Yes	-	Yes	Yes	Yes
Endogenous Control Primer and Probe Mix	-	-	Yes	Yes (CT/NG, CT/NG/UU, HIV1/HIV2/HBV/HCV, FluA-M1/FluB/RSV)	Yes
Lyophilised Master Mix	Yes	-	-	Yes	Yes
Reaction Tubes	Yes	-	-	-	-
Resuspension Buffers	Yes	Yes	Yes	Yes	Yes
Kit size (tests) Master	50	150	150	100	150



For our full list of genesig® qPCR test kits please visit primerdesign.co.uk or contact enquiry@primerdesign.co.uk

genesig® qPCR Detection Kits

At Primerdesign our mission is to enable our customers to improve human health outcomes, ensure Food Safety and Integrity of Supply Chain and enhance the well-being of pets, animals and livestock by providing an extensive portfolio of around 1500 qPCR detection kits and delivering custom development services and solutions.

Designed and Manufactured in the United Kingdom
All of our kits have been designed by experts drawing on decades of experience in bioinformatics, and are continuously reviewed for their specificity in our global sequence surveillance programme.

Our cross-functional team of manufacturing scientists carefully optimise each kit to provide consistent and reliable product quality in tandem with leading performance. A dedicated technical support team are also available to assist our customers on their individual journey to achieve results that make a real difference.

Broad Portfolio
The genesig® product range has close to 1,500 qPCR detection kits. We continue to add more kits as our customer needs constantly evolve and grow.
Our extensive portfolio includes kits to support the following sectors:

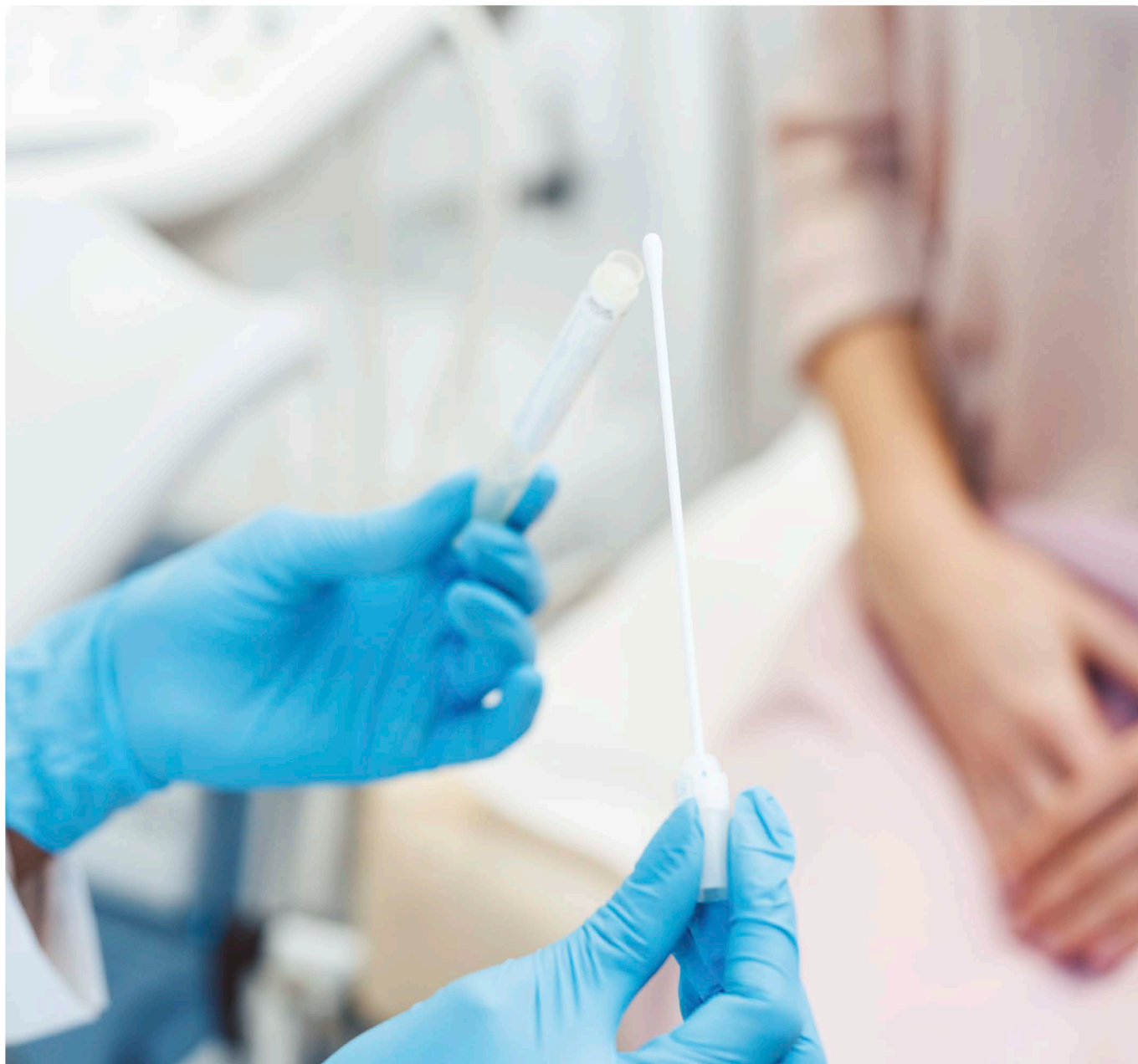
- ✓ Human pathogen
- ✓ Animal and Veterinary, including companion animals
- ✓ Food, water and agriculture testing, including aquaculture

Global Reputation
genesig® qPCR kits are trusted globally, and currently used by customers in over 100 countries worldwide.

For our full list of genesig® qPCR test kits please visit primerdesign.co.uk or contact enquiry@primerdesign.co.uk

Open Platform
The genesig range includes kits developed for open platform qPCR instruments, to give our customers the highest level of flexibility.

genesig® qPCR Detection Kit Formats
Within the genesig® qPCR detection kit range are five convenient kit formats, optimised for specific user needs and technical experience. Our genesig® Easy Kits are suitable for users of all experience levels and designed specifically for the genesig® q16 and q32 PCR instruments. The Standard and Advanced Kits can be used with the genesig® q32, and open platform qPCR cyclers. Our Complete kit range now offers all the benefits of using the Advanced kits with the addition of Master Mix. The genesigPLEX range are specialised multiplex kits, allowing the detection of multiple targets in one reaction. The table on page 2 outlines the full contents of each kit format.



For our full list of genesig® qPCR test kits please visit primerdesign.co.uk or contact enquiry@primerdesign.co.uk

genesig® qPCR Detection Kits

Complete Control of your Findings

- ✓ Quantified positive control confirms experimental performance and allows for copy number determination of your target
- ✓ Internal extraction control gives detailed insight into the efficiency of extraction and the sample quality
- ✓ Endogenous control confirms the quantity and quality of biological material
- ✓ Supplied lyophilised No cold chain shipping Fast delivery to anywhere in the world

Multiplex Analysis

genesig® kits are ideal for multi target analysis.

Every genesig® kit of the same format operates with a standardised protocol and uniform cycling conditions. This simplifies the application for the customer, as the protocol only needs to be

learned once, but can be used to test for hundreds of different targets.

In addition, kits of the same format employ a consistent cycling protocol, allowing multiple kits to be combined on the same plate on the same PCR run. This means one sample could be screened for up to 32 different pathogens at the same time.

genesigPLEX qPCR Kits

genesigPLEX Kits build on multi target analysis by incorporating multiplexing capabilities, allowing real-time PCR detection and differentiation of multiple preselected targets simultaneously in a single reaction tube.

Individual primers and probes have been designed enabling the detection of several viruses or bacteria in a single reaction through separate fluorescent channels.

The genesigPLEX qPCR kits also include either an endogenous control or internal extraction control to confirm extraction and sample quality.

These multiplex kits are available as panels for a variety of human infections including: STI, GI, respiratory, blood-borne, insect-borne, eye infection, joint-infection, transplant, meningitis, and healthcare associated; as well as for the veterinary infection of equine strangles and STDs.

The genesigPLEX kits include oasisig® lyophilised qPCR Master Mix, our unique qPCR master mix optimised for multiplex applications, providing reliable quality and performance.

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qPCR Test Kits Human Pathogen

The human pathogen detection kit range forms the largest part of the genesig® portfolio and is continually updated and reviewed.

- Human Multiplex kits
- Respiratory infections
- Gastrointestinal infections
- Sexually transmitted infections
- Urinary tract infections
- Transplant and immunosuppressed
- Meningitis
- Antimicrobial resistance
- Hepatitis infections
- Human papillomavirus
- Periodontal infections
- Genetic Markers/disorders
- Vector-borne diseases
- Malaria
- Biothreat
- Parasitic/protozoan infections

Human Multiplex kits

- genesigPLEX Atypical Pneumonia
- genesigPLEX Bacterial Meningitis
- genesigPLEX Eye Infection
- genesigPLEX Gastrointestinal Bacterial
- genesigPLEX Gastrointestinal Viral
- genesigPLEX Joint Infection
- genesigPLEX Respiratory Virus
- genesigPLEX Viral Meningitis
- genesigPLEX Insect Borne
- genesigPLEX kit for GI Bacterial II Panel
- Dengue, Zika and Chikungunya Virus
- Dengue virus subtyping
- High Risk HPV Multiplex Kit
- genesigPLEX CT/NG
- genesigPLEX CT/NG/TV Z
- genesigPLEX CMV/EBV/BKV
- genesigPLEX FluA/FluB/RSV
- genesigPLEX HBV/HCV/HIV1/HIV2
- Monkeypox 2G
- MRSA with Staphylococcal cassette chromosome MecA/FemB
- Multiplex Winterplex (SARS-CoV-2 3G, FluA/FluB/RSV)

Respiratory infections

- 2019-nCoV
- Adenovirus F41
- Adenovirus B
- Adenovirus C
- Adenovirus F&G
- Aspergillusfumigatus
- All Aspergillus species
- Aspergillus_SCRN
- Atypical Pneumonia
- Bordatella pertussis
- Burkholderia cepacia_complex
- Chlamydomphila pneumoniae

- Chlamydomphila psittaci
- Enterobacter cloacae
- Haemophilus influenzae
- H1N1 influenza
- H5N1 influenza
- Human Metapneumovirus
- Human Parainfluenza virus type 1
- Human Parainfluenza virus type 2
- Human Parainfluenza virus type 3
- Human Rhinovirus all subtypes
- Human Rhinovirus Subtype 16
- Human Rhinovirus 1B
- Human Influenza type A M2 (FluA-M2)
- Human Influenza type B (FluB)
- Human influenza A Virus subtype H3
- Influenza type A M1 (FluA-M1)
- Klebsiella pneumoniae
- Legionella pneumophila
- All Legionella species
- Leptospirosis
- Mycobacterium chimaera
- Mycobacterium tuberculosis (TB)
- Mycobacterium tuberculosis_complex
- Mycoplasma pneumoniae
- MERS-CoV
- Mumps
- Mycobacterium_spp
- Neisseria meningitidis
- Pneumocystis jirovecii
- Respiratory syncytial Virus
- Respiratory syncytial Virus A
- Streptococcus pneumoniae
- SARS coronavirus
- 2019-nCoV (SARS- CoV- 2)

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qPCR Test Kits Human Pathogen

Gastrointestinal infections

Campylobacter coli
Campylobacter jejuni
Clostridium difficile toxB
Clostridium difficile_toxA
Clostridium perfringens_cpa
Escherichia coli O157:H7
Escherichia coli_spp
Escherichia coli_stx1
Escherichia coli_stx2A
Enterococcus faecalis
Enterococcus faecium
Enterovirus
ETEC
Helicobacter pylori
Human astrovirus genotypes 1-8
Human RotavirusA
Human RotavirusB
Human RotavirusC
Klebsiella oxytoca
Listeria monocytogenes
Norovirus G1 & G2
Proteus mirabilis
Salmonella_invA
Shigella
Vibrio cholerae
All Vibrio species
Yersinia enterocolitica

Sexually transmitted infections

Candida albicans
Chlamydia trachomatis
Chlamydia
Gardnerella vaginalis
Hepatitis A virus
Hepatitis B Virus
Hepatitis C Virus
Hepatitis D Virus
Hepatitis E Virus
Human herpesvirus 3 (Varicella-Zoster virus)
Human herpesvirus 6
Human herpes virus 6, variant A
Human herpesvirus 6 variant B
Human herpesvirus 7
Human Herpes Virus 8 (Kaposi Sarcoma)
High Risk HPV
HIV1
HIV2
Human papillomavirus type 11
Human Papilloma Virus 16
Human papillomavirus type 18
Human papillomavirus type 31
Human papillomavirus type 33
Human papillomavirus type 45
Human papillomavirus type 52
Human papillomavirus type 5
Human papillomavirus type 6
Herpes simplex virus type 1
Herpes simplex virus type 1 and 2
Herpes simplex virus type 2
Mycoplasma fermentans
Mycoplasma genitalium
Mycoplasma hominis
Neisseria gonorrhoeae
Treponema pallidum
Trichomonas vaginalis
Ureaplasma urealyticum

Urinary tract infections

A. baumannii
Candida albicans
Candida glabrata
C.parapsilosis
C.tropicalis
Chlamydia
Cytomegalovirus
CT/NG
CT/NG/UU
E.cloacae
E.faecalis
Enterococcus faecium
Escherichia coli
Gardnerella vaginalis
Haemophilus ducreyi
Human papillomavirus 16
Human papillomavirus 18
Herpes simplex virus 1
Herpes simplex virus 2
Human herpesvirus 6
Klebsiella oxytoca
Klebsiella pneumoniae
Mycobacterium fortuitum
Mycoplasma genitalium
Mycoplasma hominis
Neisseria gonorrhoeae
Proteus mirabilis
Pseudomonas aeruginosa
Serratia marcescens
Staphylococcus aureus, MRSA
Staphylococcus epidermidis
Staphylococcus haemolyticus
Streptococcus agalactiae (Group B)
Streptococcus dysgalactiae
Streptococcus pyogenes (Group A)
Ureaplasma parvum
Ureaplasma urealyticum

qPCR Test Kits Human Pathogen



Transplant and immunosuppressed

Adenovirus C
Acremonium
BK Virus
Cytomegalovirus (HHV5)
Epstein barr Virus
Human Herpesvirus 3 (VZV)
Human Herpesvirus 6
Human Herpesvirus 6 variant A
Human Herpesvirus 6 variant B
Human Herpesvirus 7
Human Herpesvirus 8
JC Virus
Hepatitis B Virus
Hepatitis C Virus
Herpes simplex type 1 (HHV1)
Herpes simplex type 2 (HHV2)
Herpes simplex type 1&2 (HHV1 & 2)

Meningitis

Enterovirus
Human Herpesvirus 3 (VZV)
Herpes simplex type 1 (HHV1)
Herpes simplex type 2 (HHV2)
Herpes simplex type 1&2 (HHV1 & 2)
H.influenzae
Leptospirosis
Neisseria meningitidis
Streptococcus agalactiae (Group B)
Streptococcus pneumoniae
Viral Meningitis

Antimicrobial resistance

Antibiotic resistance: blaGES
Antibiotic resistance: blaIMP
Antibiotic resistance: blaKPC
Antibiotic resistance: blaVIM
Antibiotic resistance: OXA-48

Hepatitis

Hepatitis A (HAV)
Hepatitis B (HBV)
Hepatitis C (HCV)
Hepatitis D (HDV)
Hepatitis E (HEV)

Human papillomavirus

High Risk HPV
Human Papilloma Virus 6
Human Papilloma Virus 11
Human Papilloma Virus 16
Human Papilloma Virus 18
Human Papilloma Virus 31
Human Papilloma Virus 33
Human Papilloma Virus 45
Human Papilloma Virus 52
Human Papilloma Virus 58

Periodontal infections

Fusobacterium nucleatum
Mycoplasma salivarium
Nitrobacter
Porphyromonas gingivalis
Streptococcus mutans
Streptococcus salivarius
Treponema denticola
Tanerella forsythia

Genetic Markers/disorders

CFTR-508 (Cystic Fibrosis deletion of phenylalanine at position 508)
Factor V Leiden
Haemochromatosis
Prothrombin
JAK2-V617F



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qPCR Test Kits Human Pathogen



Vector-borne diseases

Anaplasma phagocytophilum
Bartonella quintana
Crimean–Congo haemorrhagic fever (CCHFV)
Chikungunya
Dengue
Ehrlichia
Francisella tularensis
Giardia intestinalis
Japanese encephalitis Virus
Lyme disease
Plasmodium
Rickettsia
Sandfly fever Sicilian Virus
Tick Borne Encephalitis
West Nile Virus
Yellow Fever Virus
Zika Virus

Malaria

Plasmodium falciparum
Plasmodium knowlesi
Plasmodium malariae
Plasmodium ovale
Plasmodium vivax

Biothreat

Ebola
Eastern equine encephalomyelitis virus
Lassa Virus
Marburg virus
Nipah henipavirus
Rift Valley Fever Virus
Western Equine encephalomyelitis virus

Parasitic/protozoan infections

Acanthamoeba
Ascaris lumb/Ascaris suum
Borrelia burgdorferi
Coxiella burnetii
Entamoeba histolytica
Leishmania infantum/Leishmania donovani
Legionella longbeachae
Leishmania major
Leishmania tropica
Leishmania
Mycoplasma orale
Plasmodium falciparum
Schistosoma haematobium
Schistosoma mansoni
Trypanosoma cruzi
Toxoplasma
Ureaplasma parvum



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qPCR Test Kits for Animal and Veterinary Pathogens

The veterinary range is currently the fastest growing part of the genesig® portfolio.

qPCR based veterinary kits attract a lot of attention and this product range addresses some truly unique challenges in the field.

Livestock

Ruminants pathogen detection

Protecting cattle fertility and ensuring successful breeding is paramount in the agricultural industry.

- Bovine
- Ovine + Caprine
- Porcine
- Poultry/Avian
- Equine (Multiplexes and pathogens)
- Canine
- Feline
- Others

Bovine

- Aspergillus fumigatus
- Anaplasma phagocytophilum
- Anaplasma platys
- Aspergillus all species
- Brucella abortus
- Brucella abortus vaccine screening
- Bacillus anthracis
- Babesia bigemina
- Babesia bovis
- Babesia divergens
- Brucella Melitensis
- Bibersteinia trehalosi
- Bovine adenovirus type 3
- Bovine adenovirus types 5, 6, and 8
- Bovine ephemeral fever virus
- Bovine herpesvirus type 1
- Bovine leukemia virus
- Bovine parvovirus
- Bluetongue virus
- Bovine viral diarrhoea virus
- Chlamydomphila abortus
- Coxiella burnetii
- Campylobacter Coli
- Campylobacter coli/Campylobacter jejuni
- Campylobacter fetus
- Campylobacter fetus-venerialis
- Campylobacter jejuni
- Chlamydomphila pneumoniae
- Clostridium tetani
- Capripoxvirus
- Chlamydia
- Columbid herpesvirus 1
- E.coli_O157-v2.0
- E.coli_spp
- E.coli_stx1
- E.coli_stx2A
- E.coli_stx2f
- E.coli_TeR
- Echinococcus granulosus
- Epizootic hemorrhagic disease virus
- Enterohemorrhagic Escherichia coli (EHEC)

- Enteroinvasive Escherichia coli (EIEC)
- Enteropathogenic Escherichia coli (EPEC)
- Enterotoxigenic Escherichia coli (ETEC)
- Foot & Mouth Disease Virus
- Foot and Mouth Disease Virus type A
- Foot-and-mouth disease virus type Asia 1
- Foot-and-mouth disease virus type O
- Fusarium_spp
- Giardia intestinalis_A-F
- Klebsiella oxytoca
- Klebsiella pneumoniae
- Klebsiella pneumoniae_capsule-1
- Klebsiella pneumoniae_capsule-2
- Klebsiella pneumoniae_capsule-5
- Lawsonia intracellularis
- Listeria monocytogenes
- Leptospirosis
- Mycoplasma arginini
- Mycobacterium avium
- Mycoplasma bovis
- Microsporium gypseum
- Mycoplasma mycoides cluster (includes 6 closely related species)
- Mammalian Babesiosis
- Mycobacterium avium subspecies paratuberculosis (Map)
- Mycoplasma
- Pseudomonas aeruginosa
- Pasteurella multocida
- Rabies
- Rift Valley fever virus
- Salmonella enterica
- Streptococcus pneumoniae
- Salmonella_invA
- Schmallenberg virus
- Theileria annulata
- Tritrichomonas foetus
- Theileria mutans
- Theileria parva
- Vaccinia
- Vet rotavirus A
- Vet rotavirus C
- Vesicular stomatitis virus

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qPCR Test Kits for Animal and Veterinary Pathogens

Ovine + Caprine

Acinetobacter centrale
Aspergillus fumigatus
Anaplasma phagocytophilum
Anaplasma platys
All Aspergillus
Bacillus anthracis
Babesia bovis
Babesia divergens
Brucella Melitensis
Bibersteinia trehalosi
Bluetongue virus
Bovine viral diarrhea virus
Coxiella burnetii
Campylobacter Coli
Campylobacter coli/Campylobacter jejuni
Campylobacter fetus
Campylobacter fetus venerialis
Campylobacter jejuni
Chlamydophila pneumoniae
Clostridium tetani
Capripoxvirus
Chlamydia
E.coli_0157-v2.0
E.coli_spp
E.coli_stx1
E.coli_stx2A
E.coli_stx2f
E.coli_TeR
E.granulosus
Epizootic hemorrhagic disease virus
Enterohemorrhagic Escherichia coli (EHEC)
Enteroinvasive Escherichia coli (EIEC)
Enteropathogenic Escherichia coli (EPEC)
Enterotoxigenic Escherichia coli (ETEC)
Foot and mouth disease virus
Foot and Mouth Disease Virus type A
Foot-and-mouth disease virus type Asia 1
Foot-and-mouth disease virus type O
Fusarium_spp
Giardia intestinalis_A-F
Klebsiella oxytoca

Klebsiella pneumoniae
Klebsiella pneumoniae_capsule-1
Klebsiella pneumoniae_capsule-2
Klebsiella pneumoniae_capsule-5
Lawsonia intracellularis
Listeria monocytogenes
Leptospirosis
Mycoplasma arginini
Mycobacterium avium
Mycoplasma bovis
Microsporium gypseum
Mycoplasma mycoides cluster (includes 6 closely related species)
Mycoplasma ovipneumoniae
Mammalian Babesiosis
Mycobacterium avium subspecies paratuberculosis (Map)
Mycoplasma
Orf virus
Pseudomonas aeruginosa
Pasteurella multocida
Rabies
Rift Valley Fever Virus
Salmonella enterica
Streptococcus pneumoniae
Salmonella_invA
Schmallenberg virus
Sheep pox virus
Theileria mutans
Vaccinia
Vet rotavirus A
Vet rotavirus C
Vesicular stomatitis virus

Porcine

Aspergillus fumigatus
African Swine Fever Virus
All Aspergillus
Bacillus anthracis
Babesia canis
Babesia gibsoni

Brucella Melitensis
Coxiella burnetii
Campylobacter Coli
Campylobacter coli/Campylobacter jejuni
Campylobacter jejuni
Chlamydophila pneumoniae
Clostridium tetani
Chlamydia
Classical swine fever virus
E.coli_0157-v2.0
E.coli_spp
E.coli_stx1
E.coli_stx2A
E.coli_stx2f
E.coli_TeR
Echinococcus granulosus
Enterohemorrhagic Escherichia coli (EHEC)
Enteroinvasive Escherichia coli (EIEC)
Enteropathogenic Escherichia coli (EPEC)
Enterotoxigenic Escherichia coli (ETEC)
Foot and mouth disease virus
Foot and Mouth Disease Virus type A
Foot-and-mouth disease virus type Asia 1
Foot-and-mouth disease virus type O
Fusarium_spp
Giardia intestinalis_A-F
Influenza A virus subtype H3N2
Klebsiella oxytoca
Klebsiella pneumoniae
Klebsiella pneumoniae_capsule-1
Klebsiella pneumoniae_capsule-2
Klebsiella pneumoniae_capsule-5
Lawsonia intracellularis
Listeria monocytogenes
Leptospirosis
Microsporium gypseum
Mycoplasma hyopneumoniae
Mycoplasma hyorhinis
Mammalian Babesiosis
Mycoplasma
Pseudomonas aeruginosa
Pasteurella multocida
Porcine circovirus type 1

qPCR Test Kits for Animal and Veterinary Pathogens



Porcine circovirus type 2
Porcine epidemic diarrhea virus
Porcine parvovirus
Porcine reproductive and respiratory syndrome virus - European genotype
Rabies
Rift Valley Fever Virus
Salmonella enterica
Streptococcus pneumoniae
Salmonella_invA
Suid alphaherpesvirus SUHV1
Suid alphaherpesvirus SUHV2
Swinepox
Transmissible gastroenteritis virus
Transmissible gastroenteritis virus/Porcine respiratory coronavirus
Vet rotavirus A
Vet rotavirus C
Vesicular Stomatitis Virus

Poultry/Avian

Avian orthoreovirus
vian polyomavirus
Beak and Feather Disease Virus
Chlamydophila psittaci
Chicken anemia virus

Columbid circovirus
Duck hepatitis B virus
Avian adenovirus (Egg Drop Syndrome)
Fowl adenovirus FAdV serotype 4
Fowlpox virus
Gallid herpesvirus 1
Gallid herpesvirus 2
Influenza A virus subtype H3N2
Canine Influenza - H3N8
Influenza A virus subtypes H3N8 and H7N7
Influenza A virus subtype H5
Influenza A virus subtype H5N8
Influenza A virus subtype H6
Influenza A virus subtype H7
Influenza A virus subtype H7N1
Influenza A virus subtype H7N9
Influenza A virus subtype H9
Influenza A virus subtype H9N1
Infectious bursal disease virus
Avian Infectious Bronchitis Virus (IBV)
Mycobacterium avium
Mycoplasma gallisepticum
Mycoplasma meleagridis
Mycoplasma synoviae
Newcastle disease virus (NDV)
Ornithobacterium rhinotracheale
Pasteurella multocida
Parrot Bornavirus
Psittacid herpesvirus
Pigeon adenovirus

Equine

Equine Multiplexes

genesigPLEX kit for EHV-1 and EHV-4 (Equine herpes virus)
genesigPLEX kit for EHV-2 and EHV-5 (Equine herpes virus)
genesigPlex kit for Equine Strangles
genesigPlex kit for TKP (T. equigenitalis, K.pneumoniae and P. aeruginosa)

Equine pathogens

African Horse Sickness Virus
Assinine Herpes Virus 3 (AHV-3 or EHV-8)
Bacillus anthracis
Burkholderia mallei
Coxiella burnetii
Campylobacter coli/Campylobacter jejuni
Campylobacter jejuni
Cryptococcus neoformans
Chlamydia
Eastern equine encephalitis virus (EEEV)
Equine herpesvirus type 1 (EHV-1)
Equine herpes virus type 2 (EHV-2)
Equine herpes virus type 3 (EHV-3)
Equine herpes virus type 4 (EHV-4)
Equine herpes virus type 5 (EHV-5)
Equine infectious anemia virus (EIAV)
Equine dermatophytosis
Equine Strangles
Equine Rhinovirus type 1
Equine Rhinovirus type 2
Canine Influenza - H3N8
Influenza A virus subtypes H3N8 and H7N7
Canine Influenza - H3N8 (2019 Variant)
Klebsiella oxytoca
Klebsiella pneumoniae
Klebsiella pneumoniae_capsule-1
Klebsiella pneumoniae_capsule-2
Klebsiella pneumoniae_capsule-5
Lawsonia intracellularis
Streptococcus equi-equi
Streptococcus equi-zooepidemicus
Theileria equi
Taylorella equigenitalis
Trypanosoma equiperdum
Trichomonas foetus



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qPCR Test Kits for Animal and Veterinary Pathogens

Companion Animals:

Canine

Aspergillus fumigatus
Anaplasma phagocytophilum
Anaplasma platys
All Aspergillus
Babesia canis
Babesia gibsoni
Bartonella henselae
Campylobacter Coli
Campylobacter coli/Campylobacter jejuni
Campylobacter jejuni
Candidatus Mycoplasma haemominutum
Candidatus Mycoplasma turicensis
Cryptococcus neoformans
Chlamydia psittaci
Canine adenovirus type 1
Canine adenovirus type 2
Canine coronavirus
Canine distemper virus
Chlamydia
Canine herpesvirus
Canine Pneumovirus
Canine norovirus
Canine Parainfluenza Virus
Carnivore protoparvovirus type 1
Cryptosporidium
Dirofilaria immitis
Ehrlichia canis
E.coli_spp
Echinococcus granulosus
Echinococcus multilocularis
Encephalitozoon_spp
Enterotoxigenic Escherichia coli (ETEC)
Giardia intestinalis_A-F
Klebsiella oxytoca
Klebsiella pneumoniae
Klebsiella pneumoniae_capsule-1
Klebsiella pneumoniae_capsule-2
Klebsiella pneumoniae_capsule-5
Listeria monocytogenes

Leptospirosis
Mycoplasma canis
Mycoplasma haemofelis
Mycoplasma haemofelis/Mycoplasma haemocanis
Minute Virus of Canines
Mycoplasma
Neospora caninum
Pseudomonas aeruginosa
Porphyromonas gulae
Rabies
Salmonella enterica
Streptococcus equi-zooepidemicus
Salmonella_invA
Trichophyton mentagrophytes
Toxoplasma
Vaccinia
Vesicular stomatitis virus

Feline

Aspergillus fumigatus
Anaplasma platys
Aspergillus
Bartonella henselae
Campylobacter Coli
Campylobacter coli/Campylobacter jejuni
Chlamydia felis
Campylobacter jejuni
Cryptococcus neoformans
Chlamydia psittaci
Chlamydia
Cryptosporidium
E.coli_spp
Echinococcus granulosus
Encephalitozoon_spp
Enterotoxigenic Escherichia coli (ETEC)
Feline coronavirus
Feline calicivirus
Feline leukemia virus
Feline herpesvirus
Feline immunodeficiency virus

Giardia intestinalis_A-F
Klebsiella oxytoca
Klebsiella pneumoniae
Klebsiella pneumoniae with capsule serotype 1
Klebsiella pneumoniae with capsule serotype 2
Klebsiella pneumoniae with capsule serotype 5
Listeria monocytogenes
Leptospirosis
Mycoplasma felis
Mycoplasma haemofelis
Mycoplasma haemofelis/Mycoplasma haemocanis
Mycoplasma
Pseudomonas aeruginosa
Rabies
Salmonella enterica
Streptococcus equi-zooepidemicus
Salmonella_invA
Trichomonas foetus
Trichophyton mentagrophytes
Toxoplasma
Vaccinia
Vesicular stomatitis virus



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Food, Water and Agriculture

qPCR testing methods are proven to be the fastest and most accurate method for screening water and food. We offer highly sensitive kits for food borne pathogens, agriculture, water borne pathogen detection, meat and fish speciation, allergen testing and aquaculture pathogen detection.

- Salmonid pathogen detection
- Tilapia
- Other Fish and Shellfish
- Meat speciation
- Fish speciation
- Bird speciation
- Allergen
- Contamination
- Food borne pathogens
- Spoilage: Food/Fruit, Beer & Wine
- Water testing
- Agriculture
- Other
- Cannabis pathogen screening

Aquaculture

Safeguard Aquaculture stocks with fast and specific pathogen detection.



Salmonid pathogen detection

- Aeromonas salmonicida
- Betanodavirus (NNV)
- Candidatus Branchiomonas cysticola (Ca.B.cysticola)
- Flavobacterium psychrophilum
- Infectious hematopoietic necrosis Virus (IHNV)
- Infectious Pancreatic necrosis virus (IPNV)
- Infectious Salmon Anaemia Virus (ISAV)
- ISAV- HPRO (available for NA and EU strains)
- Neoparamoeba perurans (amoebic gill disease)
- Photobacterium damsela
- Piscine Reovirus
- Piscirickettsia salmonis
- Paranucleospora theridion
- Renibacterium salmoninarum (BKD)
- Salmonid Alpha Virus (SAV)
- Salmon Gill Pox Virus (SGPV)
- Viral haemorrhagic septicaemia (VHSV)
- Yersinia ruckeri

Tilapia

- Photobacterium damsela
- Photobacterium damsela piscicida
- Streptococcus agalactiae
- Vibrio anguillarum
- Vibrio parahaemolyticus
- Vibrio spp
- Betanodavirus (NNV)
- Tilapia Lake Virus (TiLV)

Other Fish and Shellfish

- Aeromonas sobria
- Aeromonas caviae
- Aeromonas hydrophila
- Aeromonas veronii
- E.coli
- Listeria monocytogenes
- Epizootic haematopoietic necrosis virus (EHNV)
- Koi Herpes Virus (CyHV3)
- Hepatitis A Virus (HAV)
- Lymphocystivirus (LCV)
- Norovirus (oyster specific)
- Spring Viremia of carp Virus (SVCV)
- Viral haemorrhagic septacemia virus (VHS)
- White Spot Syndrome Virus (WSSV)

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Food, Water and Agriculture

qPCR Kits Speciation

Speciation	Easy AnimalFinder Kit	Easy Speciation Kit	Standard Speciation Kit	Advanced Speciation Kit
Qpcr Platform Compatibility	genesig® q16/q32	genesig® q32 and open platform instruments		
Target Species Primer and Probe Mix	Yes	Yes	Yes	Yes
Positive Control	Yes	Yes	Yes	Yes
Negative Control	Yes	Yes	Yes	Yes
Internal Extraction Control (IEC) Primer and Probe Mix	Yes	-	Yes	-
Universal Meat/Fish Primer and Probe Mix	-	Yes	-	Yes
Lyophilised Master Mix	Yes	Yes	-	-
Reaction Tubes	Yes	Yes	-	-
Resuspension Buffers	Yes	Yes	Yes	Yes
Kit Size (Tests)	50	50	100	100

Select the Optimal Kit for your Sample and Application

Sample Type	Application	genesig® Easy AnimalFINDER Kit	genesig® Easy Speciation Kit	genesig® Advanced Speciation Kit	genesig® Standard Speciation Kit
Pharmaceutical Sample Cosmetic Sample Food Manufacture Post-Clean Swab Vegan/Vegetarian Food Products	Identification of source animal	+++	-	-	+++
	Quantification of potential adulteration	-	++	++	-
Highly Processed Animal Product	Identification of source animal	+++	+	+	+++
	Quantification of potential adulteration	-	+++	+++	-
Raw/Cooked Meat	Identification of source animal	+++	+++	+++	+++
	Quantification of potential adulteration	-	+++	+++	-

+++ Highly suitable ++ Suitable + Suitability is sample dependent - Not suitable.

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Food, Water and Agriculture

Meat speciation

Buffalo (B.bubalis)
Beef (B.taurus)
Dog (C.familiaris)
Goat (C.hircus)
Donkey (E.asinus)
Horse (E.caballus)
Cat (F.catus)
Platypus (O.anatinus)
Sheep (O.aries)
Warthog (Pafricanus)
Pig (S. scrofa)

Fish speciation

Atlantic Cod (G.morhua)
Haddock (M.aeglefinus)
Whiting (M.merlangus)
Pollock (P.pollachius)
Coley (P.virens)

Bird speciation

Duck (A.platyrhynchos)
Chicken (G.gallus)
Turkey (M.gallopavo)

Allergen

Celery (A.graveolens)
Peanut (A.hypogaea)

Contamination

AnimalFinder for highly processed samples
Beef (B.taurus)
Horse (E.caballus)
Chicken (G.gallus)
Sheep (O.aries)
Pig (S. scrofa)

Food borne pathogens

Aspergillus species
Bacillus cereus
Brucella species
Campylobacter coli
Campylobacter jejuni
Clostridium botulinum
Clostridium parvum
Clostridium perfringens (alpha toxin producing)
Enterohemorrhagic Escherichia coli (EHEC)
Enteroinvasive Escherichia coli (EIEC)
Enteropathogenic Escherichia coli (EPEC)
E.coli (all strains)
E.coli O157:H7
E.coli O104:H4
E.coli (Shiga toxin)
E.coli_TeR
Giardia intestinalis
Hepatitis A virus
Legionella pneumophila
Legionella species
Listeria monocytogenes
Norovirus G1 G2
S. aureus
Salmonella species
Salmonella enterica
Vibrio species
Vibrio cholerae



Spoilage

Beer spoilage

Acetobacter_spp
Dekkera bruxellensis
Hop resistant Lactobacillus and Pediococcus species
Megasphaera cerevisiae/Megasphaera elsdenii
Pectinatus_spp
Pediococcus
Saccharomyces diastaticus
Saccharomyces cerevisiae

Wine spoilage

Acetobacter
Pediococcus
Dekkera bruxellensis
Botrytis cinerea
Pichia kudriavzevii
Saccharomyces cerevisiae
Zygosaccharamyces bailii

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Food, Water and Agriculture

Water testing

- Acanthamoeba
- Clostridium perfringens
- Campylobacter coli
- Campylobacter jejuni
- Campylobacter coli and Campylobacter jejuni
- Clostridium botulinum (toxin D)
- Clostridium perfringens
- Clostridium difficile (toxin A)
- Clostridium difficile (toxin B)
- Cryptosporidium
- Escherichia coli (all strains)
- Escherichia coli 0157:H7
- E.histolytica
- Giardia intestinalis
- Legionella species
- Legionella pneumophila
- Mycobacterium avium
- Naegleria fowleri
- Nitrosomas marina
- Nitrosomas oligotropha
- Nitrospira_spp
- Pseudomonas aeruginosa
- Salmonella enterica
- Salmonella_invA
- Vibrio cholerae
- All Vibrio species

Agriculture

Plant pathogens

- Botrytis cinerea
- Candidatus Liberibacter asiaticus
- Clavibacter michiganensis sub species michiganensis
- Fusarium species

- Hop resistant Lactobacillus and Pediococcus species
- Megasphaera cerevisiae/Megasphaera elsdenii
- Pectinatus
- Pediococcus
- Potato mop-top virus
- Spongospora subterranea
- Sugarcane mosaic virus

Other

- Bacteria Domain
- Bifidobacterium bifidum

Cannabis pathogen screening

- Aspergillus species (detects 100+ Aspergillus species)
- Aspergillus fumigatus
- Aspergillus terreus
- Aspergillus flavus
- Aspergillus niger
- Fusarium species
- Botrytis cinerea



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Master Mixes

Our range of sensitive and accurate Master Mixes offer unique enzyme/buffer combinations that allow you to get the best from your testing. Whether you are looking for fast results, optimal multiplexing capability, or simply a reliable cost-effective testing process, our Master Mixes are developed to suit you and your testing requirements.

	Precision Plus	Precision Plus OneStep	Precision FAST	oasig Standard	oasig OneStep	oasigPLUS
						
Application	Gene expression analysis (cDNA). Speciation testing. DNA pathogen detection	Gene expression analysis (RNA). RNA pathogen detection	Rapid screening. High throughput	Speciation testing. Pathogen detection. Multiplexing	Pathogen detection	Pathogen detection. Multiplexing
+SYBR Green	Yes	Yes	Yes	n/a	n/a	n/a
+ROX*	Yes	Yes	Yes	Yes	Yes	Yes
Concentration	2x	2x	2x	2x	2x	2x
Target	DNA	RNA	DNA	DNA	RNA	RNA
Fast Cycling	n/a	n/a	Yes	n/a	n/a	n/a
Multiplex	n/a	n/a	n/a	+++	n/a	+++
Inhibitor Resistant	n/a	n/a	n/a	+	No	+

*Rox passive reference dye not suitable for multiplex assays above 2 targets. +++ Highly suitable + Suitability is sample dependent.

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Easy to Use

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genesig® q16 and q32 Real-Time PCR Instruments

The genesig® q32 Instrument and genesig® q16 Instrument allow Real-Time Nucleic Acid Amplification and Fluorescence Detection.

The genesig® q32 Real-Time PCR Instrument Provides Fast Diagnostic Results

The q32 Instrument allows analysis of up to 32 reactions in either single tube, strip tube or our 32 well magazine format. The powerful genesig® q32 software is easily installed onto any PC or Mac. The q32 Instrument can be used together with dedicated Primerdesign reagents including our genesig® kits.

- ✓ Rapid DNA and RNA analysis
- ✓ Quick start templates provide straight forward set up, editing of samples and data analysis
- ✓ A wide range of Primerdesign reagents including genesig® kits for human, vet, and food pathogens, as well as food speciation testing
- ✓ 30 samples per run, alongside 1 positive and 1 negative control

The genesig® q16 Real-Time PCR Instrument Provides Portable, Streamlined Testing

The q16 Instrument can be used in a variety of settings, providing on-site testing capability to enable faster turnaround times from sample extraction to result. The q16 Instrument is the optimal tool for your qPCR testing and analysis needs.

- ✓ Minimal footprint, compatible with small workspaces, and easily portable, weighing just 2kg
- ✓ Detection kits available for numerous applications such as pathogen identification but also food speciation, or veterinary targets
- ✓ Automatic data analysis and interpretation
- ✓ 14 samples per run, alongside 1 positive and 1 negative control



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G E N E S I G

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Please feel free to contact us for free
advice or technical support.



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