

GENESIG



genesig[®] qPCR test kits by Primerdesign
Human | Veterinary | Food, water and agriculture

PRIMER
DESIGN

Convenient kit formats



	Easy Kit	Advanced Kit	Standard Kit	genesigPLEX Kit Human	genesigPLEX Kit Veterinary	genesigMYPLEX Kit
	genesig q16/q32		All other instruments: genesig q32 (PLEX coming soon), Thermo, Bio-Rad, Roche, QIAGEN...			
Multiplex qPCR				Y	Y	Y
Target primer and probe mix		Y	Y			
Positive control	Y	Y	Y	Y	Y	Y
Separate Endogenous control		Y				
Internal extraction control (IEC) primer and probe mix		Y				
Target/IEC primer and probe mix	Y				Y	
Target/endogenous control primer and probe mix				Y		Y
Lyophilised master mix	Y			Y	Y	Y
Reaction tubes	Y					
Resuspension buffers	Y	Y	Y	Y	Y	Y
Kit size (tests)	50	100-150	100-150	100	100	100

genesig[®] qPCR detection kits

Primerdesign is extremely proud to present our “genesig” range of qPCR detection kits. The range includes kits for human pathogen detection, veterinary diseases, food, water and agricultural analysis, GMO detection, species identification, biothreat detection, genotyping and many more.

Designed and manufactured in Great Britain

All of our kits are carefully designed, developed, optimised and manufactured by our world class scientists in our laboratories in Southampton, UK.

Wide range

The genesig range has more than 550 qPCR detection kits at present but the list is always growing.

The range is segmented in to five areas:

- Human pathogen testing kits
- Veterinary pathogen testing kits
- Food, water and agricultural testing kits
- Biothreat detection kits
- Genotyping testing kits

Global reputation

Primerdesign's genesig range of kits is currently used by customers in over 100 countries worldwide.

Open platform

The genesig range of kits is open platform. They are designed to work perfectly with any real time PCR machine available on the market.

genesig qPCR detection kit formats

Within the genesig qPCR detection kit range are five convenient kit formats which are optimised for specific user needs and technical experience. Our genesig Easy Kits are suitable for users of all experience levels and are designed specifically for the genesig q16. The Advanced and Standard Kit can be used on all other qPCR cyclers including the genesig q32. While genesigPLEX and genesigMYPLEX Kits are specialised multiplex kits. All kits include a positive control and resuspension buffers. The table on page 2 outlines the full contents of each kit format.

Complete control of your findings

- Copy number positive control confirms experimental performance and allows for copy number determination of target
- Internal extraction control gives detailed insight in to the success/failure of the nucleic acid extraction process
- Endogenous control reveals quality of biological sample.

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 operates with the same standardised protocol and cycling conditions. This makes them ideal as the protocol only needs to be learnt once but can be used to test for hundreds of different targets.

What's more, because every kit uses the same cycling protocol, multiple kits can be used on the same plate on the same PCR run. For example, a patient could be screened for up to 96 different pathogens at the same time.

genesigPLEX qPCR Kits

genesigPLEX qPCR Kits are unique multiplex qPCR assays that allow simultaneous real-time PCR detection of different preselected viruses. Individual primers and probes have been designed permitting multiple virus detection in a single reaction through separate fluorescent channels. The genesigPLEX qPCR Kits for human infections also all include a human endogenous control to confirm extraction of a valid biological template.

The genesigPLEX qPCR Kits are available as multiplex panels for a variety of human infections including: of the immunosuppressed, STD, respiratory, hepatitis, and blood-borne; as well as for the veterinary infection equine strangles.

The kits include oasis®PLEX Lyophilised qPCR Master Mix, our brand new, unique qPCR master mix optimised for multiplex applications. Within this master mix is ampliSOLVE, which is an exceptional solution that will remove amplicon contamination and dramatically improve multiplex qPCR data.

genesigMYPLEX qPCR Kits

genesigMYPLEX qPCR Kit STD is a unique pick and mix multiplex qPCR assay which allows simultaneous detection of up to 3 different STD viruses.

The innovative genesigMYPLEX format allows you to choose any of the 10 most prevalent STD viruses to be combined in a customised 2 or 3-way qPCR multiplex assay.

The genesigMYPLEX format is a brand-new approach to multiplex and any selection can be delivered within 4 weeks.

The kit includes oasis®PLEX Lyophilised qPCR Master Mix, our brand new, unique qPCR master mix optimised for multiplex applications. Within this master mix is ampliSOLVE, which is an exceptional solution that will remove amplicon contamination and dramatically improve multiplex qPCR data..

genesig[®] q16 and genesig[®] q32

genesig q16 Real-Time PCR Instrument

Small and portable molecular testing platform

The genesig q16 Real-Time PCR Instrument is small and highly portable to allow any business to access the power of real-time PCR. Perfect for a whole new world of molecular testing customers.

Automated analysis

The genesig q16 makes real-time PCR easy for the first time. The genesig Easy Kit format is designed specifically for the q16 and simplifies everything during test set-up. The q16 software experience is fast and intuitive, whilst analysis of the data is completely automated meaning it can be used by an expert or a complete novice with equal, powerful results.

Ground-breaking technology

As well as being remarkably beautiful, the genesig q16 is technologically powerful. It has no moving parts, making it very robust. It operates in silence and weighs less than 2kg. It can operate with a PC or Mac but can also operate in stand alone mode with the test data being downloaded on to a USB drive for analysis later.

A complete solution

The genesig q16 can be used with regular lab equipment and DNA extraction systems. But if you don't have a lab, the genesig Easy Lab-in-a-Box and the genesig Easy DNA/RNA Extraction Kit will provide all that you need to complete your molecular testing set-up.

NEW! genesig q32 Real-Time PCR Instrument

A fast qPCR instrument for all genesig kits

The genesig q32 Real-Time PCR Instrument is one of the fastest qPCR instruments on the market today due to its rapid heating and cooling, with DNA and RNA analysis completed in less than 60 minutes. Assembled from just a few building blocks, this robust qPCR instrument allows analysis of up to 32 samples in both tube or strip format.

Its powerful and easy to use genesig q32 software provides a quick start for all genesig kit applications. The software allows straightforward editing of sample and target information, and its automated data analysis calling provides easy interpretation of results.

genesig Real-Time PCR Kit compatible

All genesig Real-Time PCR Detection Kits are suitable for use on the genesig q32 instrument, including Standard, Advanced, and Easy Kit formats, providing the ultimate in flexibility.





qPCR test kits human pathogen

The human pathogen detection kit range forms the largest part of the genesig portfolio and is ever growing. This segment includes hundreds of kits for pathogenic bacteria, viruses, protozoa, parasites etc.

Respiratory infections
Sexually transmitted infections
Transplant and immunosuppressed
Hepatitis infections
Human papillomavirus
Meningitis
Gastrointestinal infections
Vector-borne diseases
Multiplex kits
Custom multiplex kits
Periodontal infections
Human parasites
Others

Respiratory infections

- Adenovirus type B
- Adenovirus type C
- Adenovirus type D
- Adenovirus type F&G
- Ajellomyces capsulatus
- BK virus
- Bordetella pertussis
- Chlamydomphila pneumoniae
- Chlamydomphila psittaci
- Coronavirus 2012 genomes
- Cryptococcus neoformans
- Enterobacter cloacae complex
- Geosmithia argillacea
- Group 1 Coronavirus genomes
- Group 2 Coronavirus genomes
- H1N1 influenza
- Haemophilus influenzae
- Human Influenza A Virus Subtype H1
- Human Influenza A Virus Subtype H3
- Human Influenza type A M2
- Human Influenza type B
- Human Metapneumovirus
- Human Parainfluenza virus type 1
- Human Parainfluenza virus type 2
- Human Parainfluenza virus type 3
- Human Parainfluenza virus type 4A
- Human Parainfluenza virus type 4A and 4B
- Human Polyomavirus 6
- Human Polyomavirus 7
- Human Polyomavirus 9
- Human Rhinovirus all subtypes (generic)
- Human Rhinovirus Subtype 14
- Human Rhinovirus Subtype 16
- Human Rhinovirus Subtype 1B
- Influenza type A M1
- Klebsiella pneumoniae
- Legionella pneumophila
- Legionella species
- Leptospirosis
- Merkel cell polyomavirus

Respiratory infections

continued

- Methicillin-resistant Staphylococcus aureus
- MRSA with Staphylococcal cassette chromosome mec
- MRSA with Staphylococcal cassette chromosome mec type IVa
- Moraxella catarrhalis
- Mycobacterium avium
- Mycobacterium avium subspecies paratuberculosis
- Mycobacterium Tuberculosis
- Mycobacterium tuberculosis complex
- Mycobacterium tuberculosis complex, targets MPB64 and IS6110
- Mycoplasma pneumoniae
- Respiratory Syncytial Virus
- Respiratory Syncytial Virus A
- Respiratory Syncytial Virus B
- SARS coronavirus
- Tamiflu resistance in swine flu H1N1

Multiplex Kit

- genesigPLEX FluA/FluB/RSV

Can't find what you're looking for? See our OnDemand Kits

See page 29

Sexually transmitted infections

- Candida albicans
- Chlamydia trachomatis
- Chlamydiaceae (all species)
- Gardnerella vaginalis
- Haemophilus ducreyi
- Human Astrovirus 1-8
- Hepatitis A Virus
- Hepatitis B Virus
- Human Immunodeficiency Virus type 1
- Human Immunodeficiency Virus type 2
- Human Papillomavirus 11
- Human Papillomavirus 16
- Human Papillomavirus 18
- Human Papillomavirus 31
- Human Papillomavirus 33
- Human Papillomavirus 45
- Human Papillomavirus 52 and 52b
- Human Papillomavirus 58
- Human Papillomavirus 6
- Mycoplasma genitalium
- Neisseria gonorrhoeae
- Treponema pallidum
- Trichomonas vaginalis
- Ureaplasma urealyticum

Multiplex Kit

- genesigPLEX CT/NG
- genesigPLEX CT/NG/TP
- genesigPLEX CT/NG/UU
- genesigPLEX HBV/HCV/HIV1/HIV2
- genesigMYPLEX STD

Transplant and immunosuppressed

- Cytomegalovirus (HHV5)
- BK virus
- NEW BK virus (CE)
- Epstein Barr Virus
- NEW Epstein Barr Virus (CE)
- Human Herpesvirus 3 (VZV)
- Human Herpesvirus 6
- Human Herpesvirus 6 variant A
- Human Herpesvirus 6 variant B
- Human Herpesvirus 7
- Human Herpesvirus 8
- Herpes simplex type 1 (HHV1)
- Herpes simplex type 1 and 2 (HHV1&2)
- Herpes simplex type 2 (HHV2)

Multiplex Kit

- genesigPLEX CMV/EBV/BKV

Hepatitis infections

- Hepatitis A Virus
- Hepatitis B Virus
- Hepatitis C Virus
- Hepatitis Delta Virus
- Hepatitis E Virus

Multiplex Kit

- genesigPLEX HAV/HEV
- genesigPLEX HBV/HCV/HIV1/HIV2

Human papillomavirus

- Human Papillomavirus 6
- Human Papillomavirus 11
- Human Papillomavirus 16
- Human Papillomavirus 18
- Human Papillomavirus 31
- Human Papillomavirus 33
- Human Papillomavirus 45
- Human Papillomavirus 52 and 52b
- Human Papillomavirus 58

Multiplex Kit

- High Risk HPV Multiplex Kit

Meningitis

- Cytomegalovirus (HHV5)
- Enterovirus
- Haemophilus influenzae
- Herpes simplex type 1 (HHV1)
- Herpes simplex type 1 and 2 (HHV1&2)
- Herpes simplex type 2 (HHV2)
- Leptospirosis
- Lyme disease
- Neisseria meningitidis
- Streptococcus pneumoniae

Gastrointestinal infections

- Aeromonas hydrophila
- Alpha toxin producing Clostridium perfringens
- Bacillus cereus E33
- Bacteroides species
- Balamuthia mandrillaris
- Bifidobacterium bifidum
- Campylobacter Coli
- Campylobacter Jejuni
- Candida albicans
- Clostridium botulinum toxin A
- Clostridium botulinum toxin B
- Clostridium botulinum toxin E
- Clostridium botulinum toxin F
- Cryptococcus gattii
- Cryptosporidium
- Cyclospora cayetanensis
- Cystoisospora belli
- Entamoeba histolytica
- Entamoeba species
- Enterococcus faecalis
- Enterococcus faecium
- Enterohemorrhagic Escherichia coli
- Enteroinvasive Escherichia coli
- Enteropathogenic Escherichia coli
- Enterotoxigenic Escherichia coli
- Escherichia coli (all strains)
- Escherichia coli O157:H7
- Escherichia coli O104:H4
- Giardia intestinalis
- Human Bocavirus 1
- Human Rotavirus A
- Human Rotavirus B
- Human Rotavirus C
- JC virus
- Listeria monocytogenes
- Norovirus genogroups I and II
- Parechovirus
- Pathogenic Salmonella species

Gastrointestinal infections

continued

- Salmonella enterica
- shiga toxin (stx1) producing Escherichia coli
- shiga toxin (stx2f) producing Escherichia coli
- Shigella (all species)
- tellurite resistant Escherichia coli
- Toxigenic subspecies of Vibrio cholerae
- Vibrio cholerae subspecies
- Vibrio species
- Yersinia enterocolitica

Vector-borne diseases

- African Trypanosomiasis
- Anaplasma phagocytophilum
- Borrelia burgdorferi
- Chikungunya Virus
- Coxiella burnetii
- Crimean-Congo Haemorrhagic Fever Virus
- Dengue virus
- Dengue virus type 3
- Ehrlichia species
- Francisella tularensis
- Japanese Encephalitis Virus
- Leishmania infantum and Leishmania donovani
- Leishmania major
- Leishmania species
- Leishmania tropica
- Lyme disease
- Plasmodium falciparum

Vector-borne diseases

continued

- Plasmodium knowlesi
- Plasmodium malariae
- Plasmodium ovale
- Plasmodium species
- Plasmodium vivax
- Rickettsia (all species)
- Sandfly Fever Sicilian Virus
- St. Louis encephalitis virus
- Tick-borne Encephalitis Virus
- Trypanosoma cruzi
- West Nile Virus
- Western equine encephalomyelitis virus
- Yellow Fever Virus
- Zika Virus
- Zika Virus (CE)

Multiplex Kit

- Dengue, Zika and Chikungunya Virus Multiplex kit
- Dengue Subtyping Multiplex Kit

Can't find what you're looking for? See our OnDemand Kits

See page 29

Multiplex kits

- Dengue, Zika and Chikungunya Virus Multiplex kit
- Dengue Subtyping Multiplex Kit
- High Risk HPV Multiplex Kit
- genesigPLEX CT/NG/UU
- genesigPLEX CMV/EBV/BKV
- genesigPLEX FluA/FluB/RSV
- genesigPLEX HBV/HCV/HIV1/HIV2
- genesigPLEX HAV/HEV

Custom multiplex kits

genesigMYPLEX STD - Select any 2/3-way multiplex combination from these 10 key STD viruses

- Chlamydia trachomatis
- Gardnerella vaginalis
- Herpes simplex type 1 and 2
- Mycoplasma genitalium
- Mycoplasma hominis
- Neisseria gonorrhoeae
- Treponema parvum
- Trichomonas vaginalis
- Ureaplasma parvum
- Ureaplasma urealyticum

Periodontal infections

- Aggregatibacter actinomycetemcomitans
- Ascaris lumbricoides and Ascaris suum
- Lactobacillus genus
- Nitrobacter species
- Nitrosomonas oligotropha
- Nitrospira species
- Porphyromonas gingivalis
- Prevotella intermedia
- Pseudomonas stutzeri
- Streptococcus mutans
- Streptococcus salivarius
- Tannerella forsythia

Human parasites

- Ascaris lumbricoides/ascaris suum
- Acanthamoeba species
- Balamuthia mandrillaris
- Cystoisospora belli
- Entamoeba histolytica
- Giardia intestinalis
- Leishmania infantum
- Leishmania major
- Leishmania
- Leishmania tropica
- Naegleria species
- Naegleria Fowleri
- Plasmodium falciparum
- Plasmodium knowlesi

Human parasites

continued

- Plasmodium malariae
- Plasmodium ovale
- Plasmodium species
- Plasmodium vivax
- Toxoplasma gondii
- Trypanosoma cruzi
- Trypanosoma evansi
- Ureaplasma parvum

Others

- Acanthamoeba castellanii
- Acanthamoeba species
- Acholeplasma laidlawii
- Acinetobacter baumannii
- Aspergillus
- Aspergillus fumigatus
- Bacillus anthracis
- Bacillus atrophaeus
- Bartonella henselae
- Bird flu
- BK virus
- Brucella abortus
- Brucella genus (all species)
- Bundibugyo Ebola Virus
- Burkholderia cepacia complex
- Burkholderia mallei
- Burkholderia pseudomallei
- Campylobacter fetus

Others

continued

- *Campylobacter fetus* subspecies *venerialis*
- *Candida dubliniensis*
- *Chlamydia abortus*
- *Clostridium difficile* (toxin A)
- *Clostridium difficile* (toxin B)
- *Clostridium sporogenes*
- *Clostridium tetani*
- *Corynebacterium diphtheriae* (active Diphtheriae toxin domains A and B)
- Dobrava-Belgrade virus
- Encephalitozoon species
- *Enterocytozoon bieneusi*
- Eukaryota
- *Francisella tularensis*
- H10N8
- Hand, foot and mouth disease
- Human Enterovirus species
- Human Parvovirus B19
- Human Polyomavirus 6
- Human Polyomavirus 7
- Human Polyomavirus 9
- Human T-lymphotropic virus Type 2
- Human T-lymphotropic virus Type 1
- Influenza A H7N9
- *Klebsiella oxytoca*
- *Klebsiella pneumoniae*
- *Lactobacillus acidophilus*
- Lassa virus Josiah
- *Legionella longbeachae*
- Lyme disease
- *Malassezia restricta*
- Marburgvirus
- Merkel cell polyomavirus
- Methicillin-resistant *Staphylococcus aureus*
- Methicillin-resistant *Staphylococcus aureus* with *Staphylococcal cassette chromosome mec*(SCC *mec*)
- Methicillin-resistant *Staphylococcus aureus* with

- Staphylococcal cassette chromosome mec*(SCC *mec*) type IVa
- Mumps virus
- *Mycobacterium avium*
- *Mycobacterium fortuitum*
- *Mycobacterium leprae* and *Mycobacterium lepromatosis*
- *Mycobacterium marinum* and *ulcerans*
- *Mycoplasma*
- *Mycoplasma fermentans*
- *Mycoplasma hominis*
- *Mycoplasma orale*
- *Naegleria fowleri*
- *Naegleria species*
- *Oxalobacter formigenes*
- *Pasteurella multocida*
- *Pneumocystis jirovecii*
- *Propionibacterium acnes*
- *Proteus mirabilis*
- *Pseudomonas aeruginosa*
- Rabies Virus
- Reston ebola virus
- *Rickettsia prowazekii*
- Rift Valley Fever Virus
- Rubella virus
- *Serratia marcescens*
- Simian Virus 40
- Sin Nombre Virus
- *Staphylococcus aureus*
- *Staphylococcus epidermidis*
- *Staphylococcus haemolyticus*
- *Streptococcus agalactiae*
- *Streptococcus mitis*
- *Streptococcus oralis*
- *Streptococcus pneumoniae*
- *Streptococcus pyogenes*
- *Streptococcus sanguinis*
- Sudan Ebola Virus

- Tai Forest Ebola Virus
- *Toxoplasma gondii*
- *Ureaplasma parvum*
- *Yersinia pestis*
- Zaire ebola virus

Multiplex Kit

- genesigPLEX CMV/EBV/BKV

Can't find what you're looking for? See our OnDemand Kits

See page 29



qPCR test kits food, water and agriculture

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

Pathogen contamination
Genetically modified organisms (GMO)
Speciation
Allergen
Others

Pathogen contamination

- Alpha toxin producing *Clostridium perfringens*
- *Aspergillus* species
- *Bacillus cereus* E33
- *Brucella abortus*
- *Brucella* genus (all species)
- *Campylobacter* Coli
- *Campylobacter* Jejuni
- *Clostridium*
- *Coxiella burnetii*
- Crimean-Congo Haemorrhagic Fever Virus
- *Cryptosporidium parvum*
- *Cyclospora cayetanensis*
- *Entamoeba histolytica*
- *Enterococcus faecalis*
- *Enterococcus faecium*
- Enterohemorrhagic *Escherichia coli*
- Enteroinvasive *Escherichia coli*
- Enteropathogenic *Escherichia coli*
- Enterotoxigenic *Escherichia coli*
- *Escherichia coli* (all strains)
- *Escherichia coli* O157:H7
- *Escherichia coli* O104:H4
- *Francisella tularensis*
- *Giardia intestinalis* (human infections)
- Hepatitis A Virus
- Hepatitis E Virus
- Human Astrovirus 1-8
- JC virus
- *Legionella longbeachae*
- *Legionella pneumophila*
- *Legionella* species
- *Listeria monocytogenes*
- *Mycobacterium avium* subspecies paratuberculosis
- *Naegleria* species
- Norovirus genogroups I and II
- Pathogenic *Salmonella* species
- *Pseudomonas aeruginosa*
- Rotavirus
- *Salmonella enterica*
- Shiga toxin (stx1) producing *Escherichia coli*
- Shiga toxin (stx2f) producing *Escherichia coli*
- *Shigella* (all species)
- *Staphylococcus aureus*
- Toxigenic subspecies of *Vibrio cholerae*
- *Vibrio* species
- *Cystoisospora belli*
- *Propionibacterium acnes*
- *Yersinia enterocolitica*

Multiplex Kit

- genesigPLEX HAV/HEV

Can't find what you're looking for? See our OnDemand Kits

See page 29

Genetically modified organisms (GMO)

Quantification kits

- GMO Maize MON810
- GMO Maize NK603
- GMO Soya Roundup Ready

Screening kits

- GMO 35S promoter
- GMO tNOS
- GMO FMV
- GMO Maize 35S and NOS
- GMO Soya 35S and NOS

Speciation

Meat speciation kits

- Beef
- Buffalo
- Cat
- Chicken
- Dog
- Donkey
- Duck
- Goat
- Horse
- Pork
- Sheep
- Turkey

Speciation

continued

- Venison
- Warthog

Fish speciation kits

- Atlantic Cod
- Coley
- Haddock
- Pollock
- Whiting

AnimalFINDER for detection of highly processed samples/clean down validation

- Chicken
- Cod
- Cow
- Horse
- Pig
- Sheep

Allergen

- Celery: Apium graveolens

Others

- Bacteria Domain
- Bifidobacterium bifidum
- Bifidobacterium longum
- Botrytis cinerea
- Clavibacter michiganensis
- Clavibacter michiganensis sub species michiganensis
- Clostridium estertheticum
- Dekkera bruxellensis
- Fusarium species
- Hop resistant Lactobacillus and Pediococcus species
- Lactobacillus acidophilus
- Lactobacillus plantarum
- Lactococcus lactis
- M.cerevisiae/M.elsdenii
- Maize chlorotic mottle virus
- Maize mosaic nucleorhabdovirus
- Megasphaera cerevisiae/Megasphaera elsdenii
- Pectinatus genus
- Pectinatus species
- Pediococcus genus
- Pediococcus species
- Potato mop-top virus

Others

continued

- *Saccharomyces cerevisiae*
- **NEW** *Saccharomyces cerevisiae* variety *diastaticus*
- *Spongopora subterranea* f. sp. *subterranea*
- *Staphylococcus aureus*
- *Streptococcus sanguinis*
- Sugarcane mosaic virus
- tellurite resistant *Escherichia coli*
- *Ureaplasma parvum*
- *Vibrio cholerae* subspecies

Can't find what you're
looking for? See our
OnDemand Kits

See page 29



Beer spoilage detection made easy

Spoilage

Early detection of bacteria is the best method to avoid beer and beverage spoilage. Spoilage bacteria form as part of the natural decay in the brewing process and can result in wasted product and loss of profit. Detecting these bacteria in yeast stocks or in brewing equipment is the fastest and easiest way to avoid a problem.

Campden BRI Evaluation

The kits have been evaluated by Campden BRI - the UK's largest independent organisation and validation body supporting the food and drinks industry worldwide.

Hop resistant Lactobacillus and Pediococcus species

Hop resistant genes horA and horC, when found in the species lactobacillus and pediococcus, enable these lactic acid producing bacteria to grow in beer. This results in beer with bitter and unpleasant flavours.

Pectinatus

Pectinatus bacteria cause beer spoilage by producing off flavours and turbidity. Detection of these bacteria is currently carried out using conventional microbiology. However, this is complicated by the strict anaerobic conditions and lengthy incubation times required for their cultivation. Consequently, there is a need for rapid detection methods.

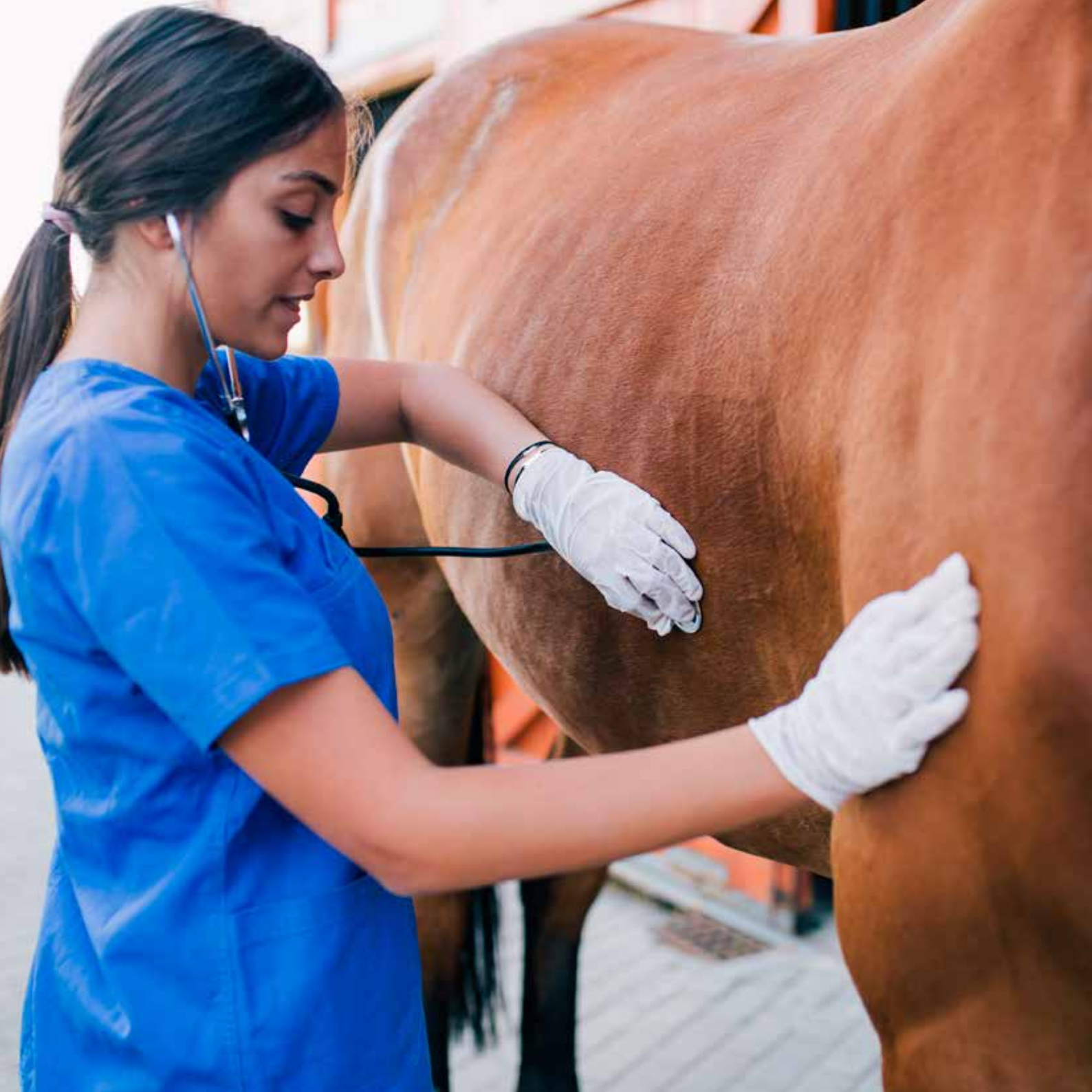
Pediococcus

Pediococcus is a very common spoilage bacteria often considered one of the most difficult types of bacteria to remove from an infected brewery. Pediococci cause high acidity, buttery aroma and inhibit yeast growth, which results in decreased fermentation rates.

Saccharomyces cerevisiae variety diastaticus

Saccharomyces cerevisiae variety diastaticus is a spoilage yeast in beer. Its ability for super-attenuation causes increased carbon dioxide concentrations, beer gushing and potential bottle explosion, as well as changes in flavour, sedimentation and increased turbidity.

CATALOGUE NO.	PRODUCT DESCRIPTION	KIT SIZE
Z-Path-HorA/HorC-EASY	genesig Easy kit for hop resistant Lactobacillus and Pediococcus species	50rxn
Z-Path-Pediococcus_spp-EASY	genesig Easy kit for Pediococcus genus	50rxn
Z-Path-Pectinatus_spp-EASY	genesig Easy kit for Pectinatus genus	50rxn
Z-Path-S.diastaticus-EASY	genesig Easy Kit for S.diastaticus	50rxn



qPCR test kits veterinary pathogens

The veterinary range is currently the fastest growing part of the genesis portfolio. qPCR based veterinary kits attract a lot of attention and this product range addresses some truly unique challenges in the field.

Can't find what you're looking for? See our OnDemand Kits

See page 29

Veterinary pathogen kits

- Acholeplasma laidlawii
- Acute bee paralysis virus
- Aeromonas hydrophila
- Aeromonas salmonicida
- African Horse Sickness Virus
- **NEW!** African swine fever virus
- African Trypanosomiasis
- Agapornis species
- Aleutian Disease Virus
- All Encephalitozoon species
- All pathogenic Salmonella species
- Anaplasma centrale
- Anaplasma marginale
- Anaplasma phagocytophilum
- Aspergillus
- Aspergillus fumigatus
- Aspiculuris tetraptera
- Atlantic salmon paramyxovirus
- Avian adenovirus EDS76 Egg Drop Syndrome
- Avian Infectious Bronchitis Virus (IBV)
- Avian Influenza A Virus Subtype H5
- Avian Influenza A Virus Subtype H6
- Avian Influenza A Virus Subtype H7
- Avian Influenza A Virus Subtype H9
- Avian orthoreovirus
- Babesia bigemina
- Babesia bovis
- Babesia caballi
- Babesia canis
- Babesia divergens
- Babesia gibsoni
- Bacillus anthracis
- Bartonella henselae
- Batrachochytrium dendrobatidis
- Beak and Feather Disease Virus
- Betanodavirus
- Bird flu
- Bluetongue Virus
- Bluetongue Virus 1
- Bordetella Bronchiseptica and Bordetella Parapertussis
- Bovine adenovirus 3
- Bovine adenovirus 5,6 and 8
- Bovine ephemeral fever virus
- Bovine herpesvirus 1
- Bovine Leukemia Virus
- Bovine parainfluenza virus 3
- Bovine Parvovirus
- Bovine Respiratory Corona Virus
- Bovine Respiratory Syncytial Virus
- Brachyspira hyodysenteriae
- Brucella abortus
- Brucella suis
- Budgerigar Fledgling Disease Virus (avian polyomavirus)
- Burkholderia mallei
- Burkholderia pseudomallei
- Camelpox virus
- Campylobacter Coli
- Campylobacter coli and Campylobacter jejuni
- Campylobacter fetus
- Campylobacter fetus subspecies venerialis
- Campylobacter Jejuni
- Candidatus Branchiomonas cysticola
- Candidatus Mycoplasma haemominutum
- Candidatus Mycoplasma turicensis
- Canine adenovirus 1
- Canine adenovirus 2
- Canine coronavirus
- Canine Distemper Virus

Veterinary pathogen kits

continued

- Canine herpes virus
- Canine influenza (H3N8)
- Canine Norovirus
- Canine parainfluenza virus
- Capripoxvirus
- Carnivore protoparvovirus 1
- Chicken anemia virus
- Chlamydiaceae (all species)
- Chlamydomphila abortus
- Chlamydomphila felis
- Chlamydomphila pneumoniae
- Chlamydomphila psittaci
- Classical swine fever virus
- Clostridium tetani
- Columbid Circovirus
- Columbid herpesvirus 1
- Coxiella burnetii
- Crimean-Congo Haemorrhagic Fever Virus
- Cryptococcus neoformans
- Cryptosporidium
- Cyclospora cayetanensis
- Cyprinid herpesvirus 3
- Dirofilaria immitis
- Dobrava-Belgrade virus
- Duck Hepatitis B Virus
- Echinococcus granulosus
- Ehrlichia canis
- Encephalitozoon cuniculi
- Encephalitozoon species
- Enterocytozoon bienersi
- Enterohemorrhagic Escherichia coli
- Enteroinvasive Escherichia coli
- Enteropathogenic Escherichia coli
- Enterotoxigenic Escherichia coli
- Epizootic haematopoietic necrosis virus
- Epizootic Hemorrhagic Disease Virus
- Equid Herpesvirus 1
- Equid Herpesvirus 2
- Equid Herpesvirus 3
- Equid Herpesvirus 4
- Equid Herpesvirus 5
- Equine Arteritis Virus
- Equine infectious anemia virus
- Equine Rhinovirus type 1
- Equine Rhinovirus type 2
- Equine/Canine influenza (H3N8 & H7N7)
- Escherichia coli (all strains)
- Escherichia coli O157:H7
- Feline calicivirus
- Feline coronavirus
- Feline Herpesvirus
- Feline Immunodeficiency Virus
- Feline Leukemia Virus
- Flavobacterium psychrophilum
- Foot and Mouth Disease Virus
- Fowlpox Virus
- Francisella tularensis
- Gallid herpesvirus 1
- Gallid herpesvirus 2
- Geosmithia argillacea
- Giardia intestinalis, Assemblage A-F(veterinary infections)
- H10N8
- H5N8
- Human Rotavirus A
- Human Rotavirus B
- Human Rotavirus C
- Infectious Bursal Disease Virus (IBDV)
- Infectious Hematopoietic Necrosis Virus
- Infectious Hypodermal and Haematopoietic Necrosis Virus
- Infectious Pancreatic Necrosis Virus
- Infectious salmon anemia virus
- Infectious salmon anemia virus (avirulent)
- Infectious salmon anemia virus (Canadian)
- Infectious salmon anemia virus (European)
- Infectious spleen and kidney necrosis virus
- Influenza A H7N9
- Israeli Acute Paralysis Virus
- Klebsiella oxytoca
- Klebsiella pneumoniae capsule type 1
- Klebsiella pneumoniae capsule type 2
- Klebsiella pneumoniae capsule type 5
- Lawsonia intracellularis
- Leptospirosis
- Listeria monocytogenes
- Lymphocystivirus
- Mammalian Babesiosis
- Marburgvirus
- Microsporium canis
- Microsporium gypseum
- Minute virus of canines (Canine minute virus)
- Mycobacterium avium
- Mycobacterium avium subspecies paratuberculosis
- Mycoplasma
- Mycoplasma arginini
- Mycoplasma bovis
- Mycoplasma felis
- Mycoplasma gallisepticum
- Mycoplasma haemofelis
- Mycoplasma hyopneumoniae
- Mycoplasma hyorhinis
- Mycoplasma meleagridis
- Mycoplasma mycoides cluster
- Mycoplasma species haemofelis and haemocanis

- Mycoplasma synoviae
- Myobia musculi
- Myocoptes musculinus
- Neoparamoeba perurans
- Neospora caninum
- Newcastle disease virus
- Paenibacillus larvae
- Paranucleospora theridion
- Parvicspsula pseudobranchicola
- Pasteurella multocida
- Peste-des-petits-ruminants Virus
- Photobacterium damsela
- Photobacterium damsela subsp. piscicida
- Pigeon adenovirus 1
- Piscine reovirus
- Piscirickettsia salmonis
- Porcine circovirus 1
- Porcine circovirus 2
- Porcine epidemic diarrhoea virus
- Porcine parvovirus
- Porcine Reproductive & Respiratory Syndrome Virus
- Porcine Reproductive & Respiratory Syndrome Virus, EU strains
- Porphyromonas gulae
- Pseudomonas aeruginosa
- Rabbit haemorrhagic disease virus type 2
- Rabies Virus
- Reston ebola virus
- Rhodococcus equi
- Rift Valley Fever Virus
- Salmon gill poxvirus
- Salmonella enterica
- Salmonid alphavirus
- SARS coronavirus
- Sheep Poxvirus

- shiga toxin (stx1) producing Escherichia coli
- shiga toxin (stx2f) producing Escherichia coli
- Spironucleus muris
- Spring Viremia of Carp Virus
- Streptococcus agalactiae
- Streptococcus equi subspecies equi
- Streptococcus equi subspecies zooepidemicus
- Streptococcus mitis
- Streptococcus oralis
- Streptococcus pneumoniae
- Streptococcus pyogenes
- Streptococcus salivarius
- Streptococcus sanguinis
- Strongylus vulgaris
- Sudan Ebola Virus
- Swinepox
- Syphacia muris
- Syphacia obvelata
- Tai Forest Ebola Virus
- Taylorella equigenitalis
- Tellurite resistant Escherichia coli
- Theileria annulata
- Theileria equi (formally Babesia equi)
- Theileria mutans
- Theileria parva
- Tilapia lake virus
- Toxigenic subspecies of Vaccinia virus
- Toxoplasma gondii
- Transmissible Gastro Enteritis Virus & Porcine Respiratory Coronavirus
- Transmissible gastroenteritis virus
- Trichophyton mentagrophytes
- Tritrichomonas foetus
- Trypanosoma equiperdum
- Trypanosoma evansi

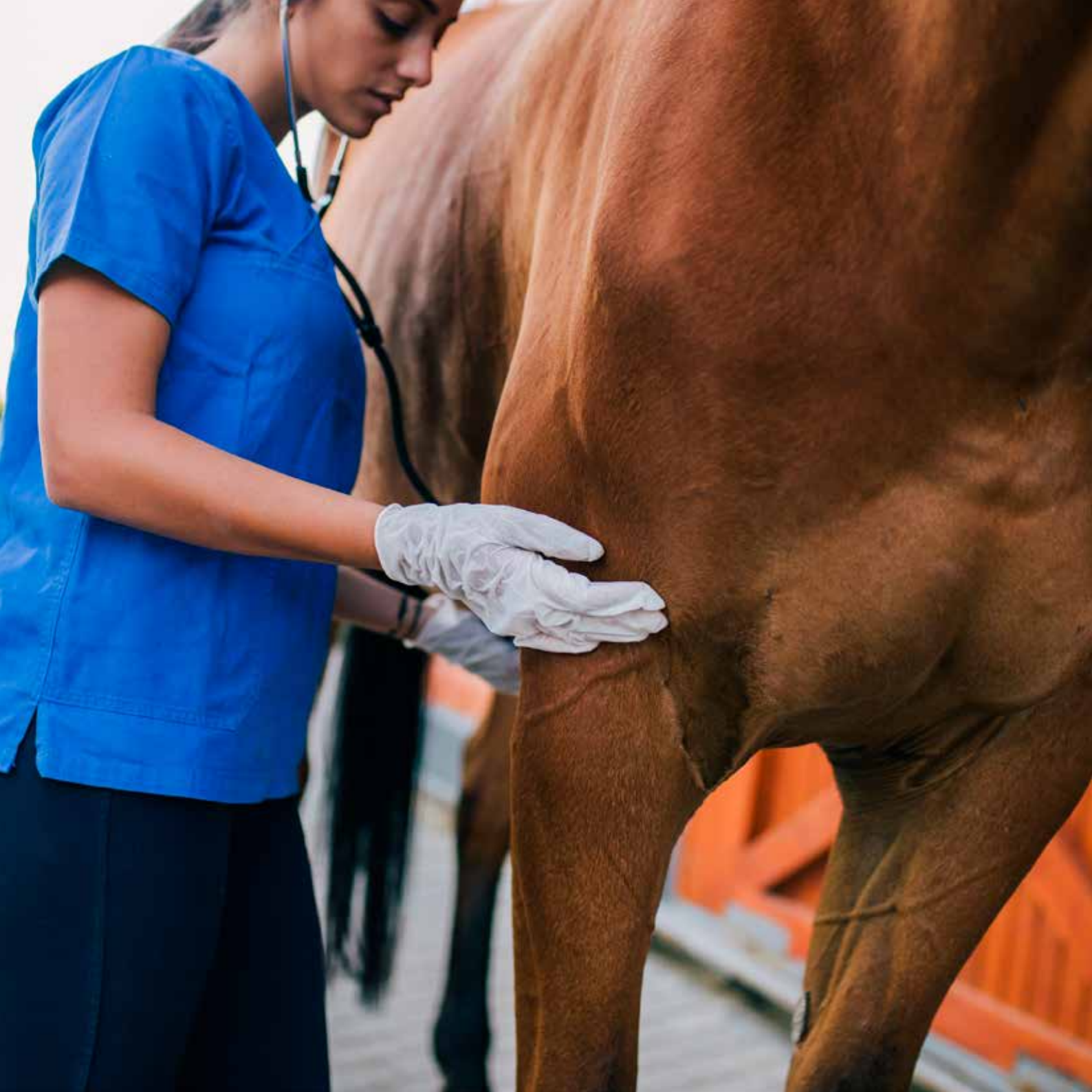
- Vesicular stomatitis virus
- Veterinary Rotavirus B
- Veterinary Rotavirus C
- Vibrio parahaemolyticus
- Viral Hemorrhagic Septicemia Virus
- White spot syndrome virus
- Yersinia ruckeri
- Zaire ebola virus

Multiplex Kit

- genesigPLEX Kit SE/SZ (Streptococcus equi subspecies equi & Streptococcus equi subspecies zooepidemicus)

Can't find what you're looking for? See our OnDemand Kits

See page 29



CEMO, *K. pneumoniae* and *P. aeruginosa* test kits

Permission granted to be used by registered laboratories in the HBLB testing scheme.

CEMO detection bundle

We offer a bundle of three validated kits to detect *Taylorella equigenitalis* (CEMO), *Klebsiella pneumoniae* and *Pseudomonas aeruginosa* independently.

These kits have been granted permission to be used by registered laboratories in the HBLB testing scheme. Please visit our website for further information and to read our validation report.

The Primerdesign kit is available in an open platform format for use on any qPCR instrumentation including those from QIAGEN, Bio-Rad, Roche and more. Alternatively genesig Easy versions of the kits are available on the genesig q16.

Kit features

- Exceptional value for money
- 150 tests per kit
- Highly sensitive
- High priming efficiency
- Sensitive to <100 copies of target
- Targets multiplexed with internal extraction control
- Positive and endogenous controls included
- Positive copy number standard curve for quantification
- Accurate controls to confirm findings

CATALOGUE NO.	PRODUCT DESCRIPTION	KIT SIZE
Z-Path-TKP	genesig real time PCR detection three kit bundle for <i>Taylorella equigenitalis</i> , <i>Klebsiella pneumoniae</i> , and <i>Pseudomonas aeruginosa</i>	150rxn
Z-Path-TKP-standard	genesig Standard real time PCR detection three kit bundle for <i>Taylorella equigenitalis</i> , <i>Klebsiella pneumoniae</i> , and <i>Pseudomonas aeruginosa</i>	150rxn



qPCR test kits biothreat

qPCR is the perfect tool for rapid detection of hazardous biological agents like anthrax, cholera toxins etc.

Biothreat

- All Ehrlichia species
- All pathogenic Salmonella species
- Bacillus anthracis
- Brucella genus (all species)
- Burkholderia mallei
- Burkholderia pseudomallei
- Chlamydia psittaci
- Clostridium botulinum toxin A; B; & E
- Coxiella burnetii
- Cryptosporidium parvum
- Eastern equine encephalitis virus
- Ebola virus; & Sudan ebola virus
- Escherichia coli O157:H7
- Francisella tularensis
- Lassa virus Josiah
- Marburg virus
- Nipah henipavirus
- Rickettsia prowazekii
- Rift Valley Fever Virus
- Shigella (all species)
- Staphylococcus aureus
- Vaccinia virus
- Vibrio cholerae (toxigenic subspecies)
- Western equine encephalomyelitis virus
- Yersinia pestis

Can't find what you're looking for? See our OnDemand Kits

See page 29



0.1 liter (d) 100 ml
max. 100 ml
speed 1000 rpm
1000 rpm
1000 rpm
1000 rpm
1000 rpm



qPCR test kits genotyping

quasa kits (Quantitative Allele Specific Amplification) are developed specifically for the detection of rare mutations. quasa kits give specific and sensitive detection down to low copy numbers in the presence of competing wild type DNA. Kits are quantitative and sensitive down to 0.1%. For germline mutation testing our snpsig kits use our own proprietary genotyping method (snpsig) to maximise the resolution between wild type samples and variant samples. These novel kits can be used on any real time PCR machine using familiar protocols, whilst resulting in exceptional genotyping data.

Somatic mutation detection
Drug resistance detection
Germline mutation detection

Somatic mutation detection

- BRAF (V600E)
- JAK2 v617f
- EGFR-T790M

Drug resistance detection

- Antibiotic Resistance: blaGES
- Tamiflu resistance H1N1-H275Y

Germline mutation detection

- CSRP3-W4R
- CYP2C19 codon 212
- CYP2C19 codon 227
- Cystic Fibrosis (CFTR)
- Factor V Leiden
- GABBR2-E421K
- GSTP1-A114V
- GSTP1-I105V
- Haemochromatosis
- IL17F-H161R
- IL23R-R381Q
- IL28B-rs12979860
- OPRM1 N40D (Opiod receptor)
- Prothrombin

Can't find what you're looking for? See our OnDemand Kits

See page 29



OnDemand Kits

Guaranteed High Quality Custom Kits Expertly Designed and Developed on Request

OnDemand Kits are Real-Time PCR assays developed on request to meet your specific requirements, giving you an assay of the highest quality, which specifically works for you.

We offer precise qPCR assay development including primer/probe design, PCR mix optimisation and assay development to ensure a very effective qPCR reaction.

This service allows for the combination of bioinformatic design and development, in conjunction with laboratory testing and evaluation, to provide personally designed primers to match your exact needs and ensure high levels of sensitivity and specificity.

Product Features

- Top quality assays with guaranteed results
- Designed by 'in-house' bioinformatical experts, not databases
- Scientifically validated in our laboratory
- Preliminary feasibility confirms if OnDemand assay is likely possible
- An assay for almost any application

OnDemand Kits are sold for research use only and are not licensed for diagnostic procedures.

Technical Information

Our standard assay formats include Double-Dye cleavage probe (e.g. TaqMan® probes) or as primer only kits for use with SYBR® Green chemistry.

Kit Contents

- **OnDemand Advanced Kit:** Target primer & probe set, positive control, internal extraction control primer & probe set, internal extraction control template, endogenous control primer & probe set, RNase/DNase free water, template preparation buffer, Feasibility Report, Kit Data Sheet (incl. anchor nucleotide).
- **OnDemand Easy Kit:** Target primer & probe set, oasis® Lyophilised qPCR Master Mix (DNA/RNA or RNA), oasis® resuspension buffer, positive control, internal extraction control, RNase/DNase free water, template preparation buffer, 54x genesig q16 reaction tubes, Feasibility Report, Kit Data Sheet (incl. anchor nucleotide).

Visit our website for further information and FAQs, or send us an email to enquiry@primerdesign.co.uk.

Examples of OnDemand Kits

A preliminary investigation of the targets below suggest these organisms can have an effective qPCR assay developed which would match our high performance criteria of specificity, sensitivity and efficiency.

If you are interested in any OnDemand Kits please check out the purchasing section on the previous page, or alternatively contact us via email: enquiry@primerdesign.co.uk or telephone: +44 (0) 23 8074 8830.

Human related targets

Veterinary targets

Food and agriculture targets

Human related targets

Antibiotic resistance markers

- blaCTX-M (beta-lactamases)
- blaCTX-M2/M9 (beta-lactamases)
- blaSHV
- blaTEM
- MecA
- VanA
- VanB

Gastrointestinal infection

- Ancylostoma duodenale
- Blastocystis hominis
- Enterococcus caseliflavus
- Helicobacter pylori
- Necator americanus

Respiratory infection

- Actinobacillus capsulatus
- Human Parainfluenzavirus 4 (HPIV4B)
- Human Rhinovirus 9 (HRV9)
- Human Rhinovirus 29 (HRV29)
- Simkania negevensis
- Trichodysplasia spinulosa polyomavirus
- WU Polyomavirus (WUPyV)

Vector-borne infection

- Borrelia afzelii
- Borrelia garinii
- Chaoyang virus (ChaoV)

Other human pathogens

- Aureobasidium pullulans
- Bacillus licheniformis

- Carnobacterium maltaromaticum
- Coniothyrium telephii
- Filifactor alocis
- Human measles
- Human Polyomavirus 12 (HPyV12)
- KI polyomavirus (KIPyV)
- Lactobacillus sakei / Lactobacillus curvatus
- Schistosoma haematobium
- Schistosoma mansoni
- STL polyomavirus (STLPyV)
- Tsukamurella incheonensis

Veterinary targets

- Ancylostoma duodenale
- Bluetongue virus (BTV-8)
- Cladosporium spp
- Corynebacterium pseudotuberculosis
- Enterocytozoon hepatopenaei
- Grass carp reovirus (GCRV)
- Mycoplasma iowae
- Mycoplasma suis
- Ornithobacterium rhinotracheale
- Photobacterium phosphoreum
- Slow bee paralysis virus (SBPV)
- Vesivirus 2117
- Wesselsbron virus (WESSV)

Food and agriculture targets

Speciation

- European Eel (*Anguilla anguilla*)
- European Plaice (*Pleuronectes platessa*)
- House Mouse (*Mus musculus*)
- Ostrich (*Struthio camelus*)
- Pea (*Pisum sativum*)
- Universal Fish

AnimalFINDER

- Atlantic Cod (*Gadus morhua*)
- Cat (*Felis silvestris*)
- Coley (*Pollachius virens*)
- Deer (*Venison*)
- Dog (*Canis lupus familiaris*)
- Donkey (*Equus africanus asinus*)
- Duck (*Anas platyrhynchos*)
- European Plaice (*Pleuronectes platessa*)
- Goat (*Capra hircus*)
- Haddock (*Melanogrammus aeglefinus*)
- Ostrich (*Struthio camelus*)
- Pollock (*Pollachius pollachius*)
- Universal Fish
- Water Buffalo (*Bubalus bubalis*)
- Whiting (*Merlangius merlangus*)
- Wild Turkey (*Meleagris gallopavo*)

Pathogen contamination

- E.coli Shiga toxin (stx2A)
- E.coli Shiga toxin (stx2C)
- Shewanella putrefaciens

GMO and plant pathogens

- Empetrum nigrum

- Lactobacillus plantarum / Lactobacillus paraplantarum
- Maize-Bt176
- Maize-Bt11
- Maize Dwarf Mosaic Virus (MDMV)
- Yellow Mealworm Beetle (*T.molitor*)

oasig[®] Lyophilised 2X qPCR Master Mixes

High quality, robust 2X qPCR master mix and OneStep RT-qPCR master mix supplied lyophilised.

The core components are a hot start Taq polymerase enzyme and a modified MMLV reverse transcriptase enzyme with a Magnesium Chloride based buffer. Stabilisers and preservatives ensure that lyophilisation does not affect the performance.

Product features

- Supplied lyophilised – no cold shipping required
- Precise reproducible results
- One product works perfectly with all real time PCR machines

oasig[®] lyophilised reagents represent a milestone in qPCR technology

Their formulation stabilises all of the active components and allows them to be shipped and stored at room temperature. They are stable for more than 18 months at ambient temperatures. This hugely simplifies the logistics of purchasing, shipping and using the technology. Whether you are in a sophisticated laboratory in Texas or a mobile field hospital in Timbuktu we can supply complete qPCR kit and reagent packages to your door quickly and cheaply via standard shipping methods without the need for dry ice or a cold chain of any sort.

The performance of the reagents is second to none. We are confident that you will find excellent data quality and even see an improvement in data quality versus many traditional frozen master mixes.

CATALOGUE NO.	PRODUCT DESCRIPTION	KIT SIZE
Z-oasig-standard-150	oasig [®] Lyophilised 2X qPCR Master Mix	150rxn
Z-oasig-onestep-150	oasig [®] Lyophilised 2X OneStep RT-qPCR Master Mix	150rxn

oasig[®]PLEX Lyophilised qPCR Master Mixes

oasig[®]PLEX Lyophilised qPCR Master Mix

oasig[®]PLEX Lyophilised qPCR Master Mix is a freeze-dried 2X master mix that is optimised to produce an enhanced level of performance in multiplex applications. The qPCR master mix is designed for rapid cycling protocols and contains an antibody mediated hot start mechanism which releases more active enzyme and requires a much shorter activation time.

Included in our oasig[®]PLEX Lyophilised qPCR Master Mix is ampliSOLVE[®], an innovative solution which will remove amplicon contamination, resulting in an enhanced efficiency and performance of the qPCR reaction.

- Optimised for multiplex applications
- Higher throughput
- Reduced shipping costs
- ampliSOLVE for artefact removal
- Supplied lyophilised - no cold chain shipping required

oasig[®]PLEX Lyophilised OneStep RT-qPCR Master Mix

oasig[®]PLEX Lyophilised qPCR Master Mix is a freeze-dried speciality 2X master mix optimised for use in multiplex OneStep RT-qPCR. The kit contains optimised enzyme levels and our proprietary enzyme-buffer system to maximise performance of multiplex assays.

Included in our 2X master mix is ampliSOLVE, an innovative solution which will remove amplicon contamination and reduce the possibility of primer dimer formation. Resulting in an enhanced efficiency and performance of the qPCR reaction.

- Optimised for multiplex applications
- Higher throughput
- Reduced shipping costs
- ampliSOLVE for artefact removal
- Supplied lyophilised - no cold chain shipping required
- Suitable for both RNA and DNA/RNA

CATALOGUE NO.	PRODUCT DESCRIPTION	KIT SIZE
Z-oasigPLEX-150	oasigPLEX Lyophilised qPCR Master Mix	150rxn
Z-oasigPLEX-OS-150	oasigPLEX Lyophilised OneStep RT-qPCR Master Mix	150rxn

PrecisionFAST® & PrecisionPLUS® qPCR Master Mix

PrecisionFAST® qPCR Master Mix

PrecisionFAST 2X real-time PCR Master Mix is an ultra-fast, cost-saving mix for qPCR. The mix is designed for rapid cycling protocols that can dramatically shorten run times. Our unique enzyme/buffer combination has been especially optimised, and shows market leading performance vs. other commercially available master mixes.

Product features

- Ultra-fast enzyme
- qPCR data in as little as 40 minutes
- Formulations available for any real-time PCR machine
- Minimises primer dimer formation

PrecisionPLUS® qPCR Master Mix & PrecisionPLUS® OneStep RT-qPCR Master Mix

High quality, robust 2X real-time PCR master mix at an exceptionally low cost. Our unique formulation gives a superior quality of data with a bigger signal to noise ratio, brighter, steeper and more precise amplification plots, and shows market leading performance vs. other commercially available master mixes.

PrecisionPLUS OneStep contains all the required components for a perfect one-step reverse transcription qPCR analysis in a single, closed tube reaction mix. The operator simply adds RNA and a primer/probe mix for a complete, one step RNA to Cq reaction.

Product features

- Huge cost saving
- Precise reproducible results
- Formulations available for any real-time PCR machine
- Available premixed with SYBR® Green free of charge
- PrecisionPLUS® OneStep RT-qPCR Master Mix suitable for both RNA and DNA

CATALOGUE NO.	PRODUCT DESCRIPTION	KIT SIZE
Z-PFAST-1ml; 2ml; 5ml; 10ml; 20ml	PrecisionFAST qPCR Master Mix	1ml; 2ml; 5ml; 10ml; 20ml
Z-PPLUS-1ml; 2ml; 5ml; 10ml; 20ml	PrecisionPLUS qPCR Master Mix	1ml; 2ml; 5ml; 10ml; 20ml
Z-OSPLUS-1ml; 2ml; 5ml; 10ml; 20ml	PrecisionPLUS OneStep RT-qPCR Master Mix	1ml; 2ml; 5ml; 10ml; 20ml



genesig[®] Easy Extraction Kits

Easy extraction from virtually any sample type - it's fast, and incredibly easy to perform.

The genesig Easy DNA/RNA Extraction Kit allows DNA/RNA and RNA extraction from virtually any sample type using magnetic bead technology - it's fast, and incredibly easy to perform.

- Extracts DNA/RNA and RNA with high yields <60 minutes
- Works with huge range of sample types
- Safe protocol with no phenolic chemicals
- No centrifuge or electrical equipment required - for use in the lab or in the field

The genesig easy DNA/RNA extraction protocol begins with a simple lysis step where cells and tissue are lysed to release their nucleic acid. Then tiny magnetic particles are added to bind to RNA/DNA. When placed on to the genesig magnetic separator the particles are pulled to the side of the tube making it easy to remove the unwanted supernatant with a pipette. Then a series of simple wash steps are performed before the DNA/RNA is washed off the beads back in to solution, ready for analysis by real time PCR. Its fast, and incredibly easy to perform.

Suitable sample types

Suitable sample types include whole blood, plasma and serum; saliva and sputum; faeces and urine; tissues; and bacterial culture broth, as well as meat, fish, milk and cooked or processed meats, plus plant, soil and water.



The genesig[®] Lab-in-a-Box

Create a lab for anyone and anywhere.

Even if you've never performed a DNA/RNA test in your life, the genesig q16 makes it affordable and easy to do. If you've never done this kind of testing then you probably don't have a laboratory. That's fine, as our Lab-in-a-Box provides all of the simple tools that you'll need to get started.

- A genesig magnetic rack for DNA/RNA extraction
- Fixed volume, colour-coded pipettes for simple liquid handling
- Disposable tips for the pipettes
- Tube racks to hold everything in place whilst you work
- Digital laboratory timer



CATALOGUE NO.	PRODUCT DESCRIPTION	KIT SIZE
Z-genesigEASY-EK	genesig Easy DNA/RNA Extraction Kit	50 extractions
Z-genesigEASY-MR	genesig Easy Magnetic Rack for DNA/RNA extraction	1 rack
Z-genesigEASY-LIAB	Lab-in-a-Box containing all the tools needed to prepare samples for the genesig q16	1 box

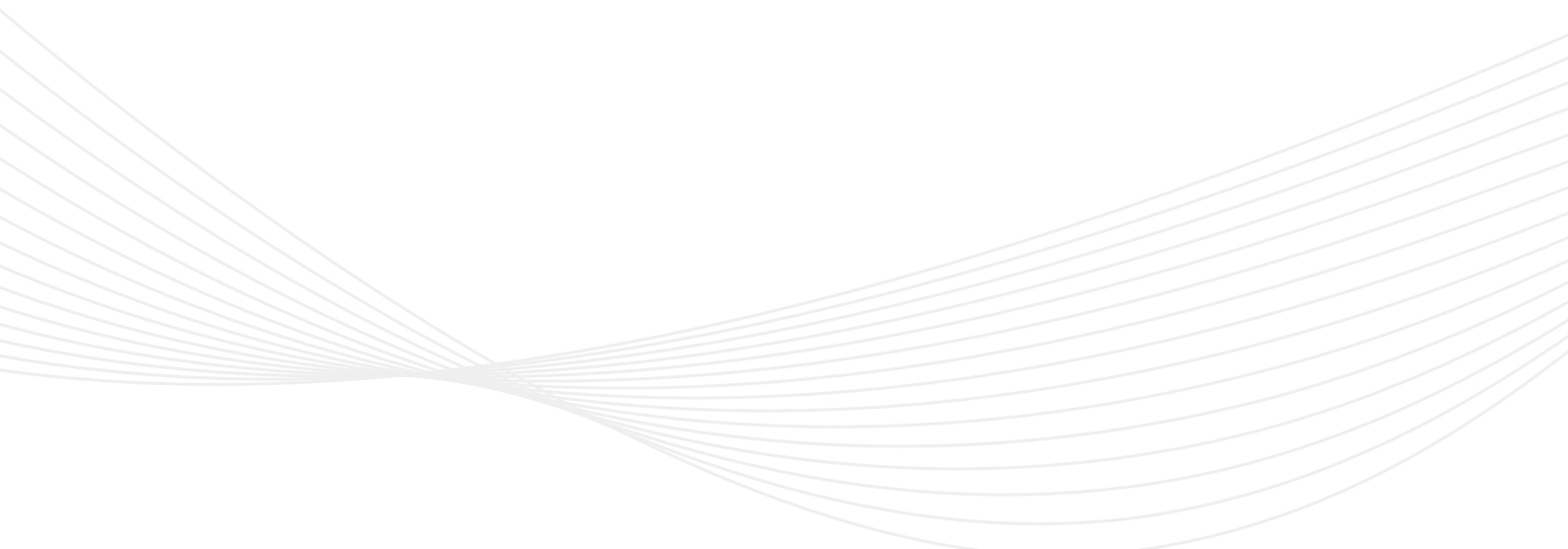
ampliSOLVE®, genesig®, oasig® and the Primerdesign logo are all trademarks of Primerdesign Ltd.

The PCR process is covered by US Patents 4,683,195 and 4,683,202 and foreign equivalents owned by Hoffmann-La Roche AG.

SYBR® Green is a registered trade mark of Molecular Probes Inc.

TaqMan® is a registered trademark of Roche Molecular Systems, Inc.

The purchase of the Primerdesign™ reagents cannot be construed as an authorisation or implicit licence to practice PCR under any patents held by Hoffmann-LaRoche Inc.



Notes



GENESIG

genesig qPCR test kits by Primerdesign
www.primerdesign.co.uk

genesig kits are sold for general laboratory and research use only. Please feel free to contact us for free advice or technical support.

Primerdesign Ltd
York House
School Lane
Chandlers Ford
United Kingdom
SO53 4DG

Telephone: +44 (0)23 8074 8830

Fax: +44 (0)870 836 2155

Orders: orders@primerdesign.co.uk

Enquiries: enquiry@primerdesign.co.uk

Technical support: support@primerdesign.co.uk

Version: MM008 Issue 06



MD606750



FM559592

Primerdesign is part of the Novacyt Group of companies

NOVACYT
GROUP