



DNA testing

Everything...

Everyone...

Everywhere...

The genesig® q16



The genesig[®] q16

What is the genesig q16?

The genesig q16 is a revolutionary instrument launched by Primerdesign Ltd. The instrument is designed to accompany the genesig product range which includes kits for over 400 different DNA testing applications. The q16 can test up to 16 samples at a time and is designed to make DNA testing affordable and easy for anyone in any business.

What can I use it for?

The genesig product range includes tests for a massive range of applications:

Infectious disease screening detect the presence of just about any known virus or bacteria. HIV in a blood sample? MRSA on a hospital ward? Norovirus on a cruise ship?

Veterinary diagnostics Diagnosis of disease in animals. TB in cattle? FIV in cats? Foot and Mouth in pigs?

Food and water testing You can test for crucial targets in any food business. Horse meat in a beef burger? Salmonella in a kitchen? E.coli in food supply chain?

Bio-threat detection Screening vulnerable environments for weaponised or emerging biothreats. Anthrax in a post room? Cholera in a disaster zone?

What is DNA testing?

DNA testing is the most sensitive and precise way to detect and quantify the presence of a DNA target. The underlying technology within the genesig q16 is real-time quantitative PCR. The technology has been around for 20 years, but to date has been complex and expensive to perform. The genesig q16 changes all that.

I don't have a laboratory. Can I use it?

Yes! If you don't have a laboratory it really doesn't matter. The instrument is designed to be used by anyone, anywhere. There is no complex programming or data analysis required. All of that is taken care of by our clever software. All you get is the answers to the questions you ask.

Alongside the instrument we can also supply you a complete 'lab-in-a-box' containing the few simple tools that you need to do your own DNA testing.

Is everything completely automated?

No. You will need to follow some very simple steps to extract the DNA from your sample. Then put it in to a tube and on to the q16. It's easy. And we'll provide incredibly simple instructions to guide you through your first experience.

The genesig[®] easy kit range



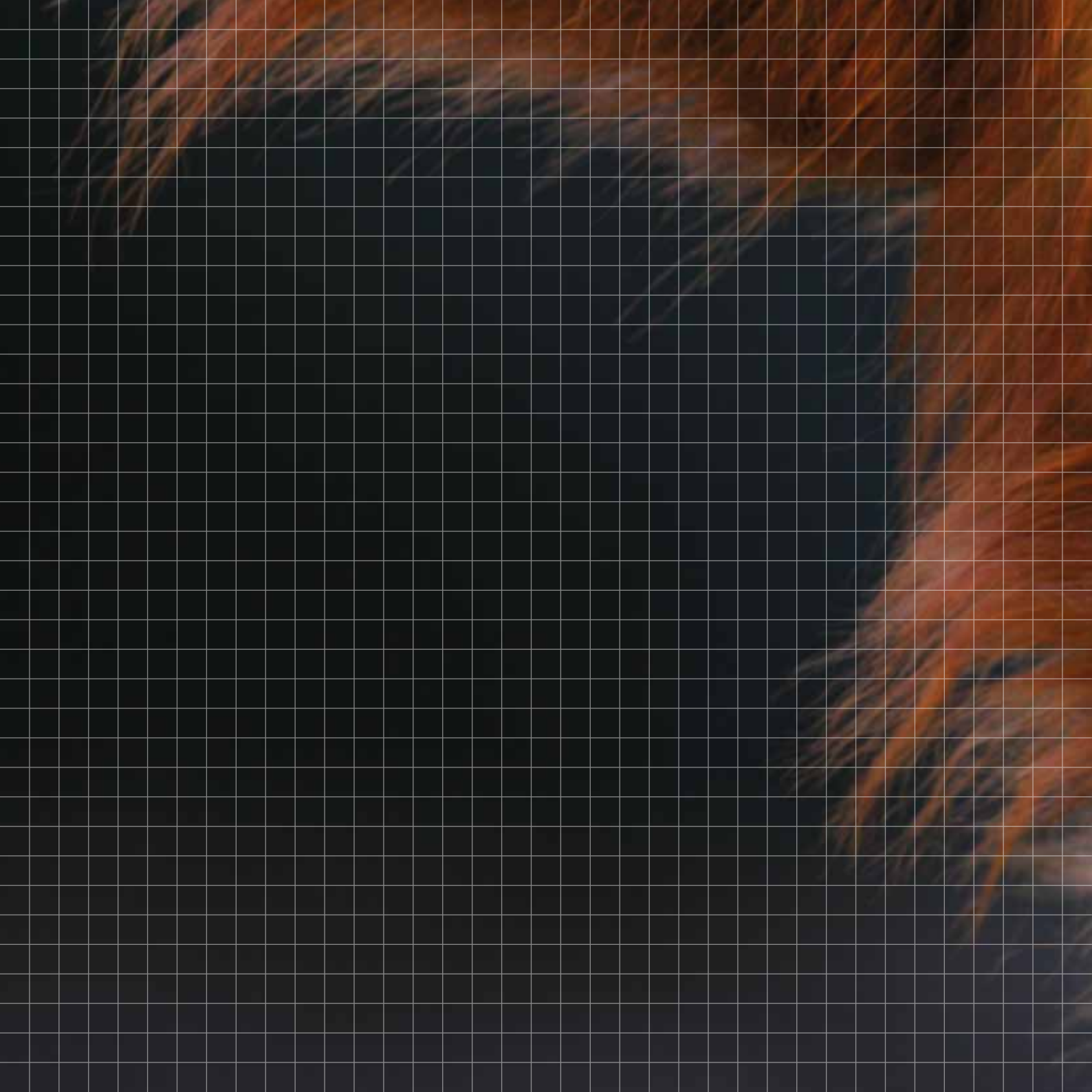
What is a genesig easy kit?

genesig is a catalogue of over 400 different DNA testing kits for a wide range of applications. The kits come in 3 formats: advanced, standard and easy. The genesig easy kit range is the simplest to use version and is designed specifically for use on the genesig q16 instrument.

What is in the kit?

The kit contains all of the components required to run a DNA test. The kit is freeze-dried so that it can be shipped at room temperature. To use it you simply rehydrate the kit components, mix them and combine with your DNA, before placing into the genesig q16 and starting the automated analysis. (DNA extraction solutions supplied separately)







qPCR test kits
Human pathogen

qPCR test kits Human pathogen

Human 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

Herpes viral infections

Hepatitis infections

Human papillomavirus

Gastrointestinal infections

Vector-borne diseases

Meningitis

Periodontal infections

Others

Respiratory infections

- Adenovirus type B
- Adenovirus type C
- Chlamydomphila psittaci
- Adenovirus type F&G
- Ajellomyces capsulata
- Chlamydomphila pneumoniae
- Cryptococcus neoformans
- Enterobacter cloacae
- Geosmithia argillacea
- H1N1 influenza
- H7N9 Influenza
- Haemophilus influenzae
- Human Bocavirus
- Human Group 1 Coronavirus genomes
- Human Group 2 Coronavirus genomes
- Human Influenza A virus (M1)
- Human Influenza A virus (M2)
- Human influenza A virus subtype (H1)
- Human influenza A virus subtype (H3)
- Human influenza B virus
- 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 4B
- Human Polyomavirus 6
- Human Polyomavirus 7
- Human Polyomavirus 9
- Human Rhinovirus 14
- Human Rhinovirus 16
- Human Rhinovirus 1B
- Human Rhinovirus 29
- Human Rhinovirus 9
- Human Rhinovirus all subtypes
- Klebsiella pneumoniae
- Legionella all species
- Legionella pneumophila
- Leptospirosis
- Merkel cell polyomavirus
- Methicillin-resistant Staphylococcus aureus
- Moraxella (all species)
- Moraxella catarrhalis
- Mycobacterium avium
- Mycobacterium avium subspecies paratuberculosis
- Mycobacterium Tuberculosis
- Mycobacterium tuberculosis complex
- Mycoplasma pneumoniae
- Novel Coronavirus hCoV-EMC / MERS
- Respiratory Syncytial Virus (all species)
- Respiratory Syncytial Virus type A
- Respiratory Syncytial Virus type B
- SARS coronavirus
- Simkania negevensis

Sexually transmitted infections

- *Candida albicans*
- Chlamydia
- Herpes simplex type 1 (HHV1)
- Chlamydia Trachomatis
- *Haemophilus ducreyi*
- Hepatitis A Virus
- Hepatitis B Virus
- Herpes simplex type 1 and 2 (HHV1&2)
- Herpes simplex type 2 (HHV2)
- Human Immunodeficiency Virus type 1
- Human Immunodeficiency Virus type 2
- Human Papillomavirus 11
- Human Papillomavirus 16
- Human Papillomavirus 18
- Human Papillomavirus 33
- Human Papillomavirus 52 and 52b
- Human Papillomavirus 58
- Human Papillomavirus 6
- *Mycoplasma hominis*
- *Neisseria gonorrhoeae*
- *Treponema pallidum*
- *Trichomonas vaginalis*
- *Ureaplasma urealyticum*

Herpes viral infections

- Cytomegalovirus (HHV5)
- Epstein Barr Virus (HHV4)
- Human Herpesvirus 6
- Herpes simplex type 1 (HHV1)
- Herpes simplex type 1 and 2 (HHV1&2)
- Herpes simplex type 2 (HHV2)
- Human Herpesvirus 3
- Human Herpesvirus 7
- Human Herpesvirus 8

Hepatitis infections

- Hepatitis A Virus (HAV)
- Hepatitis B Virus (HBV)
- Hepatitis C Virus (HCV)
- Hepatitis Delta Virus (HDV)
- Hepatitis E Virus (HEV)

Human papillomavirus

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

Gastrointestinal infections

- Aeromonas hydrophila
- Ancylostoma duodenale
- Bifidobacterium longum
- Bacillus cereus E33
- Bacteroides species
- Balamuthia mandrillaris
- Bifidobacterium bifidum
- Blastocystis genus
- Campylobacter Coli
- Campylobacter Jejuni
- Candida albicans
- Clostridium perfringens species
- Clostridium perfringens types A & B
- Cryptosporidium
- Cyclospora cayetanensis
- Entamoeba histolytica
- Entamoeba species
- Enterobacter cloacae
- Enterococcus caseliffavus
- Enterococcus faecalis
- Enterococcus faecium
- Enteropathogenic Escherichia coli
- Escherichia coli
- Escherichia coli O157:H7
- Escherichia coli O104:H4
- Giardia intestinalis
- Helicobacter pylori
- Human Bocavirus
- Listeria monocytogenes
- Norovirus genotypes 1 and 2
- Rotavirus A
- Rotavirus B
- Rotavirus C
- Salmonella enterica
- Salmonella species
- Shiga toxin producing Escherichia coli
- Shigella
- Tellurite resistant Escherichia coli
- Vibrio cholerae
- Vibrio cholerae subspecies
- Vibrio species
- Yersinia enterocolitica

Vector-borne diseases

- African Trypanosomiasis
- Anaplasma phagocytophilum
- Coxiella burnetii
- Borrelia afzelii
- Borrelia burgdorferi
- Borrelia garinii
- Chikungunya Virus
- Crimean-Congo Haemorrhagic Fever Virus
- Dengue virus
- Dengue virus type 3
- Ehrlichia species
- Francisella tularensis
- Japanese Encephalitis Virus
- Leishmania infantum
- Leishmania major
- Leishmania species
- Leishmania tropica
- Lyme disease
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium malariae
- Plasmodium ovale
- Plasmodium species
- Plasmodium vivax
- Rickettsia
- Sandfly Fever Sicilian Virus
- Tick-borne Encephalitis Virus
- Trypanosoma cruzi
- Trypanosoma evansi
- Wesselsbron Virus
- West Nile Virus
- Western equine encephalomyelitis virus
- Yellow Fever Virus

Meningitis

- Cytomegalovirus (HHV5)
- Enterovirus
- Herpes simplex type 2 (HHV2)
- Epstein Barr Virus (HHV4)
- Haemophilus influenzae
- Herpes simplex type 1 (HHV1)
- Herpes simplex type 1 and 2 (HHV1&2)
- Leptospirosis
- Neisseria meningitidis
- Streptococcus pneumoniae

Periodontal infections

- Aggregatibacter actinomycetemcomitans
- Porphyromonas gingivalis
- Prevotella intermedia
- Streptococcus mutans
- Streptococcus salivarius
- Tannerella forsythia
- Treponema denticola

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you're looking for?
New kits on demand

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Others

- Acanthamoeba species
- Acinetobacter baumannii
- Aspergillus fumigatus
- Aspergillus species
- Bacillus anthracis
- Bartonella henselae
- BK Polyomavirus
- Brucella abortus
- Brucella genus
- Bundibugyo Ebola Virus
- Burkholderia cepacia complex
- Burkholderia mallei
- Burkholderia pseudomallei
- Campylobacter fetus
- Campylobacter fetus subspecies venerealis
- Chlamydia abortus
- Chaoyang virus
- Clostridium difficile (toxin A)
- Clostridium difficile (toxin B)
- Clostridium tetani
- Corynebacterium diphtheriae A
- Corynebacterium diphtheriae B
- Corynebacterium diphtheriae toxin A&B
- Dobrava-Belgrade virus
- Encephalitozoon species
- Enterocytozoon bienersi
- Francisella tularensis
- Fungi Kingdom
- Hand, foot and mouth disease
- Human Enterovirus species
- Human Measles Virus
- Human Parvovirus B19
- Human T-lymphotropic virus Type 2
- Human T-lymphotropic virus Type 1
- Klebsiella oxytoca
- Klebsiella pneumoniae
- Legionella species
- Leprosy
- Lyme disease
- Merkel cell polyomavirus
- Methicillin-resistant Staphylococcus aureus
- MRSA-SCC mec type IVa
- MRSA-Staphylococcal cassette chromosome mec
- Mumps virus
- Mycobacterium species
- Mycoplasma hominis
- Mycoplasma fermentans
- Mycobacterium marinum & Mycobacterium ulcerans
- Mycoplasma orale
- Naegleria species
- Orf
- Pneumocystis jirovecii
- Proteus mirabilis
- Pseudomonas aeruginosa
- Rabies Virus
- Reston ebola 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
- Trichodysplasia spinulosa associated polyomavirus
- Tsukamurella incheonensis
- Zaire ebola virus

Can't find what
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qPCR test kits
**Veterinary and
agricultural pathogen**

qPCR test kits Veterinary and agricultural pathogen

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

Avian

Bovine

Ovine/caprine

Equine

Feline

Canine

Piscean

Others

Avian

- Acinetobacter baumannii
- African Trypanosomiasis
- Aspergillus fumigatus
- Avian adenovirus (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
- Avian polyomavirus (Budgerigar Fledgling virus)
- Beak and Feather Disease Virus
- Blastocystis genus
- Burkholderia mallei
- Burkholderia pseudomallei
- Campylobacter Coli
- Campylobacter Jejuni
- Chicken anemia virus
- Chlamydomphila psittaci
- Columbid herpesvirus 1
- Coxiella burnetii
- Cryptosporidium
- Duck Hepatitis B Virus
- Enterocytozoon bienensei
- Escherichia coli
- Escherichia coli O157:H7
- Fowlpox Virus
- Gallid herpesvirus 1
- Gallid herpesvirus 2
- H5N1
- H7N9
- Infectious Bursal Disease Virus (IBDV)
- Listeria monocytogenes
- Microsporium gypseum
- Mycobacterium avium
- Mycobacterium avium subspecies paratuberculosis
- Mycoplasma gallisepticum
- Newcastle disease virus
- Ornithobacterium rhinotracheale
- Pasteurella multocida
- Rift Valley Fever Virus
- Rotavirus A
- Rotavirus B
- Rotavirus C
- Salmonella enterica
- Salmonella species
- Shiga toxin producing Escherichia coli
- Tellurite resistant Escherichia coli

Bovine

- African Trypanosomiasis
- Anaplasma centrale
- Anaplasma marginale
- Anaplasma phagocytophilum
- Babesia bigemina
- Babesia bovis
- Babesia divergens
- Bacillus anthracis
- Blastocystis genus
- Bluetongue Virus
- Bluetongue Virus 1
- Bluetongue Virus 8
- Bovine herpesvirus 1
- Bovine Leukemia Virus
- Bovine Viral Diarrhoea Virus
- Brucella abortus
- Campylobacter fetus
- Campylobacter fetus subspecies venerealis
- Campylobacter Jejuni
- Chlamydia
- Chlamydophila abortus
- Chlamydophila psittaci
- Coxiella burnetii
- Crimean-Congo Haemorrhagic Fever Virus
- Cryptosporidium
- Encephalitozoon species
- Enterocytozoon bienewsi
- Escherichia coli
- Escherichia coli 0157:H7
- Foot and Mouth Disease Virus
- Giardia intestinalis
- Leptospirosis
- Mycobacterium avium subspecies paratuberculosis
- Mycoplasma mycoides cluster

- Pasteurella multocida
- Rabies Virus
- Rift Valley Fever Virus
- Rotavirus A
- Rotavirus B
- Rotavirus C
- Shiga toxin producing Escherichia coli
- Streptococcus agalactiae
- Tellurite resistant Escherichia coli
- Theileria annulata
- Theileria mutans
- Theileria parva
- Trichophyton mentagrophytes
- Tritrichomonas foetus
- Trypanosoma evansi
- Wesselsbron Virus

Ovine/caprine

- African Trypanosomiasis
- Anaplasma marginale
- Anaplasma phagocytophilum
- Blastocystis genus
- Bluetongue Virus
- Bluetongue Virus 1
- Bluetongue Virus 8
- Campylobacter fetus
- Campylobacter fetus subspecies venerealis
- Capripoxvirus
- Chlamydia
- Clostridium tetani
- Coxiella burnetii
- Crimean-Congo Haemorrhagic Fever Virus
- Cryptosporidium
- Enterocytozoon bienewsi
- Escherichia coli
- Escherichia coli 0157:H7
- Foot and Mouth Disease Virus
- Leptospirosis
- Listeria monocytogenes
- Mycobacterium avium subspecies paratuberculosis
- Mycoplasma mycoides cluster
- Peste-des-petits-ruminants Virus
- Rift Valley Fever Virus
- Rotavirus A
- Rotavirus B
- Rotavirus C
- Salmonella enterica
- Salmonella species
- Sheep Poxvirus
- Shiga toxin producing Escherichia coli
- Streptococcus agalactiae
- Tellurite resistant Escherichia coli
- Wesselsbron Virus

Equine

- African Horse Sickness Virus
- African Trypanosomiasis
- Babesia caballi
- Blastocystis genus
- Chlamydomyxa abortus
- Clostridium tetani
- Encephalitozoon species
- Enterocytozoon bieneusi
- Equid Herpesvirus 1
- Equid Herpesvirus 4
- Equine infectious anemia virus
- Foot and Mouth Disease Virus
- Leptospirosis
- Mycoplasma arginini
- Strongylus vulgaris
- Rabies Virus
- Rift Valley Fever Virus
- Rotavirus A
- Rotavirus b
- Streptococcus agalactiae
- Theileria equi
- Trypanosoma equiperdum
- Trypanosoma evansi
- Wesselsbron Virus

Feline

- African Trypanosomiasis
- Ancylostoma duodenale
- Bartonella henselae
- Blastocystis genus
- Bordetella bronchiseptica & Bordetella parapertussis
- Chlamydia
- Chlamydomyxa felis
- Encephalitozoon species
- Enterocytozoon bieneusi
- Feline calicivirus
- Feline coronavirus
- Feline Herpesvirus
- Feline Immunodeficiency Virus
- Feline Leukemia Virus
- Geosmithia argillacea
- Giardia intestinalis
- Leptospirosis
- Microsporium gypseum
- Mycoplasma felis
- Mycoplasma haemofelis
- Mycoplasma arginini
- Pasteurella multocida
- Rotavirus A
- Rotavirus B
- Rotavirus C
- SARS coronavirus
- Streptococcus agalactiae
- Toxoplasma gondii
- Trichophyton mentagrophytes
- Tritrichomonas foetus

Canine

- African Trypanosomiasis
- Ancylostoma duodenale
- Aspergillus fumigatus
- Blastocystis genus
- Bordetella bronchiseptica & Bordetella parapertussis
- Canine Babesiosis
- Canine Distemper Virus
- Canine herpes virus
- Canine Norovirus
- Canine parainfluenza virus
- Chlamydia
- Clostridium tetani
- Encephalitozoon species
- Enterocytozoon bieneusi
- Geosmithia argillacea
- Giardia intestinalis
- Leishmania infantum
- Leptospirosis
- Mycoplasma arginini
- Microsporium canis
- Microsporium gypseum
- Mycoplasma species haemofelis and haemocanis
- Neospora caninum
- Pasteurella multocida
- Rabies Virus
- Rotavirus A
- Rotavirus B
- Rotavirus C
- SARS coronavirus
- Streptococcus agalactiae
- Trichophyton mentagrophytes

Porcine

- African Trypanosomiasis
- Blastocystis genus
- Campylobacter Jejuni
- Chlamydia
- Chlamydophila abortus
- Cryptosporidium
- Encephalitozoon species
- Enterocytozoon bienersi
- Escherichia coli
- Escherichia coli O157:H7
- Leptospirosis
- Mycoplasma arginini
- Mycoplasma hyorhinis
- Pasteurella multocida
- Porcine circovirus 1
- Porcine circovirus 2
- Porcine Reproductive and Respiratory Syndrome Virus
- Rotavirus A
- Rotavirus B
- Rotavirus C
- Salmonella enterica
- Salmonella species
- Shiga toxin producing Escherichia coli
- Streptococcus agalactiae
- Tellurite resistant Escherichia coli
- Wesselsbron Virus

Piscean

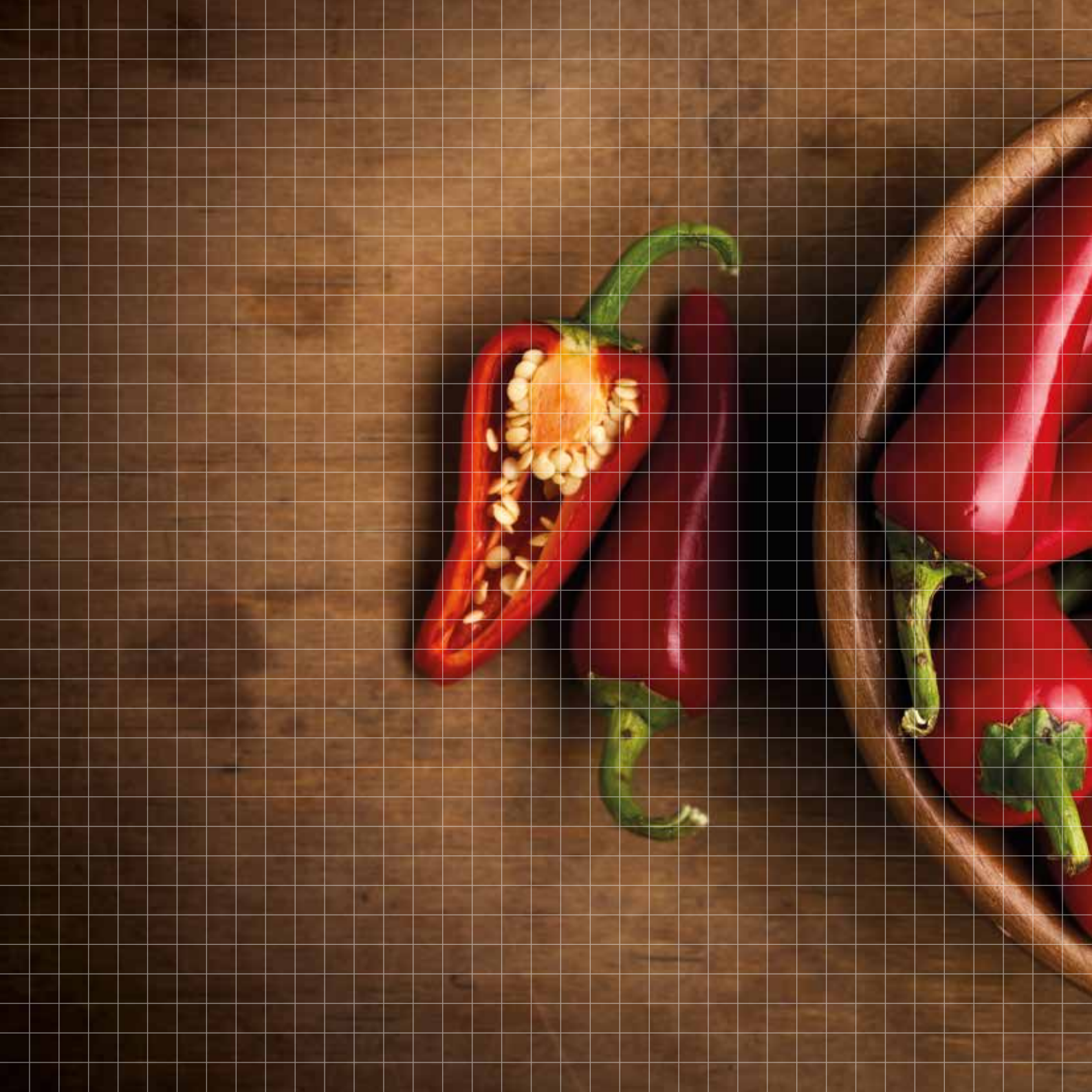
- Aeromonas hydrophila
- Cyprinid herpesvirus 3
- Enterocytozoon bienersi
- Grass Carp Reovirus
- Infectious Hematopoietic Necrosis Virus
- Infectious Pancreatic Necrosis Virus
- Mycobacterium marinum & Mycobacterium ulcerans
- Shewanella putrefaciens
- Spring Viremia of Carp Virus
- Viral Hemorrhagic Septicemia Virus

Others

- Aleutian Disease Virus
- Acholeplasma laidlawii
- Batrachochytrium dendrobatidis
- Botrytis cinerea
- Camelpox virus
- Clavibacter michiganensis sub species michiganensis
- Cryptococcus neoformans
- Cyclospora cayetanensis
- Dobrava-Belgrade virus
- Epizootic Hemorrhagic Disease Virus
- Francisella tularensis
- Israeli Acute Paralysis Virus
- Mycoplasma arginini
- Maize Dwarf Mosaic Virus
- Mycobacterium species
- Sudan Ebola Virus
- Sugarcane Mosaic Virus
- Tai Forest Ebola Virus
- Vesivirus2117
- Zaire ebola virus

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you're looking for?
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qPCR test kits
Food and water

qPCR test kits Food and water

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

Allergens

Speciation

Pathogen contamination

Others

Allergens

Nuts

- Macadamia: *Macadamia integrifolia*
- Cashew: *Anacardium occidentale*
- Pistachio: *Pistacia vera*
- Hazelnut: *Corylus avellana*
- Almond: *Prunus dulcis*
- Walnut: *Juglans regia*

- Celery: *Apium graveolens*

Speciation

Meat Speciation kits

- Beef
- Buffalo
- Cat
- Chicken
- Deer
- Dog
- Donkey
- Duck
- Goat
- Horse
- Ostrich
- Pork
- Sheep
- Turkey
- Warthog
- Universal Meat Detection

Fish Speciation kits

- European Plaice: *Pleuronectes platessa*
- Haddock: *Melanogrammus aeglefinus*
- Atlantic Cod: *Gadus morhua*
- Whiting: *Merlangius merlangus*
- Pollock: *Pollachius virens*
- Universal fish detection

Pathogen contamination

- all Legionella species
 - Bacillus cereus E33
 - Brucella genus
 - Campylobacter Coli
 - Campylobacter Jejuni
 - Clostridium estertheticum
 - Clostridium perfringens A&B
 - Clostridium perfringens species
 - Coxiella burnetii
 - Crimean-Congo Haemorrhagic Fever Virus
 - Cyclospora cayetanensis
 - Dekkera bruxellensis
 - Enterococcus faecalis
 - Enterococcus faecium
 - Escherichia coli
 - Escherichia coli 0157:H7
 - Eubacteria
 - Francisella tularensis
 - Giardia intestinalis
 - Hepatitis A Virus
 - Hepatitis E Virus
 - JC Polyomavirus
 - Legionella pneumophila
 - Listeria monocytogenes
 - Mycobacterium avium subspecies paratuberculosis
 - Naegleria species
 - Norovirus genotypes 1 and 2
 - Pseudomonas aeruginosa
 - Salmonella enterica
 - Salmonella species
 - Shewanella putrefaciens
 - Shiga toxin producing Escherichia coli
 - Shigella
 - Simkania negevensis
 - Staphylococcus aureus
- Tellurite resistant Escherichia coli
 - Toxigenic subspecies of Vibrio cholerae
 - Vibrio cholerae subspecies
 - Vibrio species
 - Yersinia enterocolitica

Others

- Bifidobacterium bifidum
- Bifidobacterium longum
- Lactococcus lactis

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you're looking for?
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qPCR test kits
Biothreat

Biothreat

- Bacillus anthracis
- Burkholderia mallei
- Burkholderia pseudomallei
- Chlamydophila psittaci
- Clostridium perfringens species
- Coxiella burnetii
- Cryptosporidium
- Escherichia coli O157:H7
- Francisella tularensis
- H1N1 influenza
- Rift Valley Fever Virus
- Toxigenic subspecies of Vibrio cholerae
- Vaccinia virus

Can't find what
you're looking for?
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qPCR test kits Biothreat

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

Biothreat



**For more information please
visit www.genesig.com**

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

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