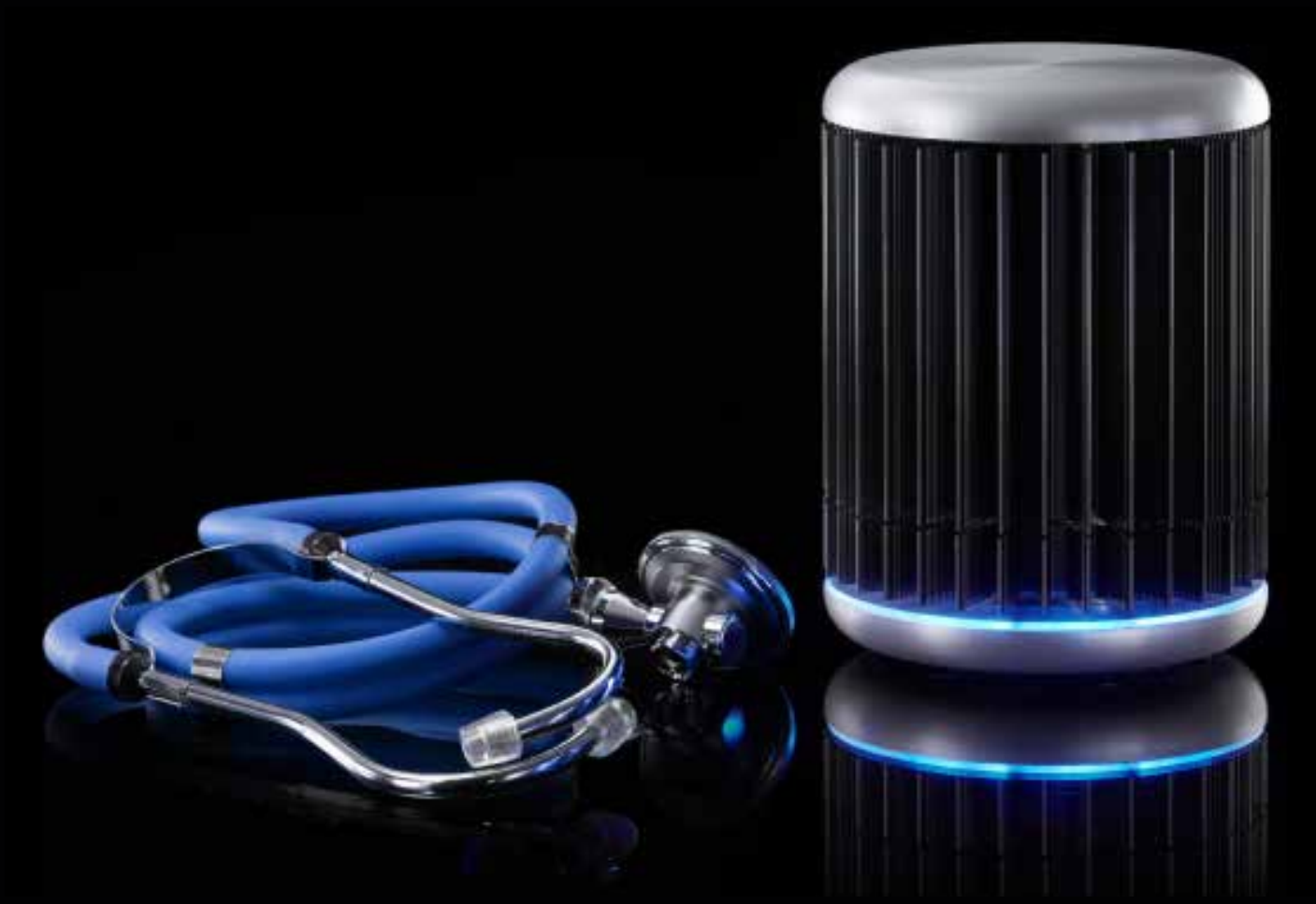
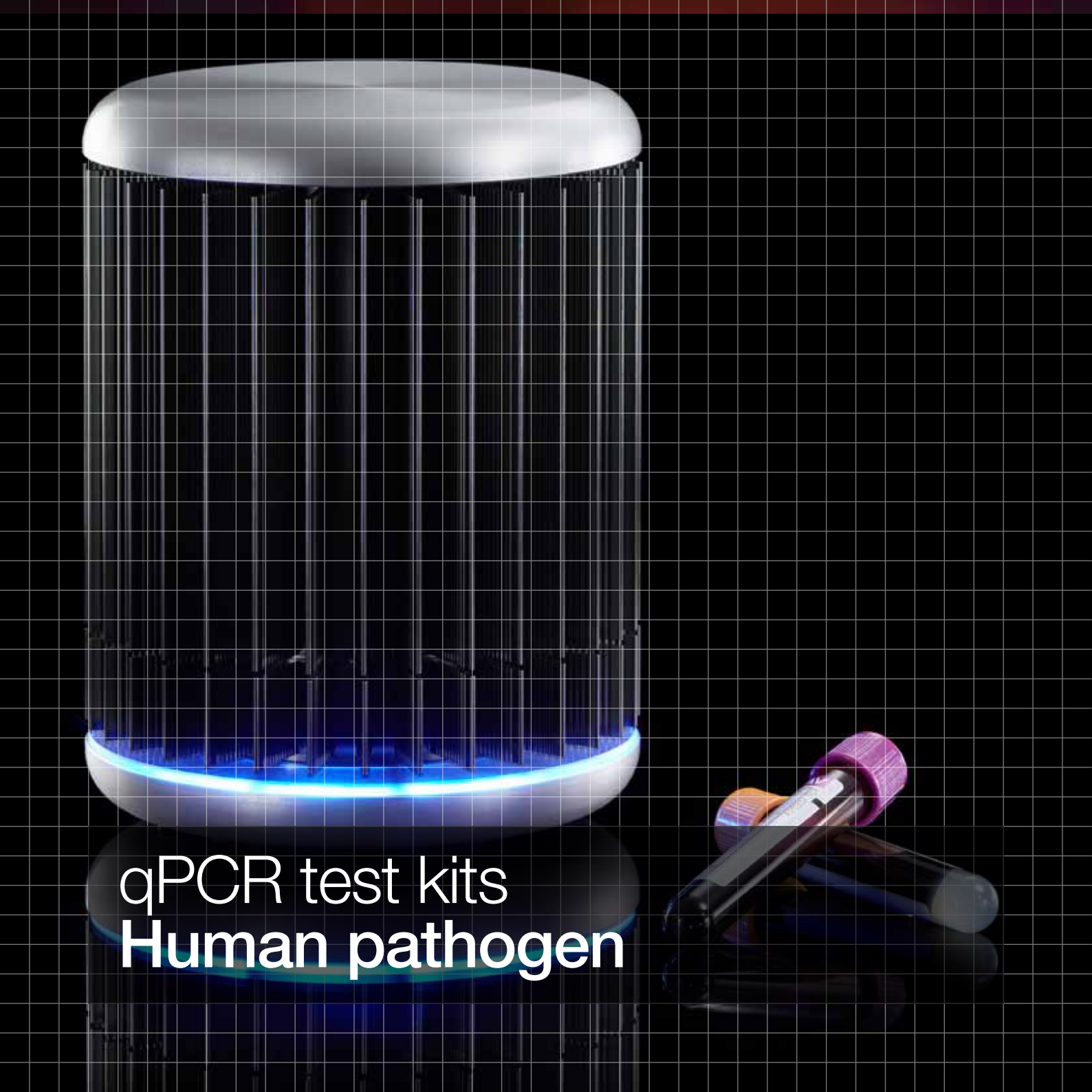


DNA testing

Human
Pathogen
Detection

The genesig® q16

Primerdesign®



qPCR test kits
Human pathogen

Respiratory infections

- Adenovirus type B
- Adenovirus type C
- Adenovirus type F&G
- Ajellomyces capsulata
- Chlamydophila pneumoniae
- Chlamydophila psittaci
- Cryptococcus gattii
- Cryptococcus neoformans
- Enterobacter cloacae
- Geosmithia argillacea
- H1N1 influenza
- H7N9 Influenza
- Haemophilus influenzae
- Human Bocavirus
- Human Enterovirus species
- 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
- KI polyomavirus
- Klebsiella pneumoniae
- Legionella all species
- Legionella longbeachae
- 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
- WU polyomavirus

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

Biothreat

Vector-borne diseases

Meningitis

Periodontal infections

Human parasites

Others

Sexually transmitted infections

- Candida albicans
- Chlamydia
- Chlamydia Trachomatis
- Haemophilus ducreyi
- Hepatitis A Virus
- Hepatitis B Virus
- Herpes simplex type 1 (HHV1)
- 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)
- Herpes simplex type 1 (HHV1)
- Herpes simplex type 1 and 2 (HHV1&2)
- Herpes simplex type 2 (HHV2)
- Human Herpesvirus 3
- Human Herpesvirus 6
- Human Herpesvirus 6 A
- Human Herpesvirus 6 B
- 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 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

Gastrointestinal infections

- Aeromonas hydrophila
- Ancylostoma duodenale
- Bacillus cereus E33
- Bacteroides species
- Balamuthia mandrillaris
- Bifidobacterium bifidum
- Bifidobacterium longum
- 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 caseliflavus
- Enterococcus faecalis
- Enterococcus faecium
- Enteropathogenic Escherichia coli
- Escherichia coli
- Escherichia coli 0157:H7
- Escherichia coli O104:H4
- Giardia intestinalis
- Helicobacter pylori
- Human Astrovirus 1-8
- Human Bocavirus
- Human Enterovirus species
- Listeria monocytogenes
- Norovirus genotypes 1 and 2
- Oxalobacter formigenes
- Rotavirus A
- Rotavirus B
- Rotavirus C
- Salmonella enterica
- Salmonella species
- Shiga toxin(Stx-1) E. coli
- Shiga toxin(Stx-2b) E. coli
- Shiga toxin(Stx-2c) E. coli
- Shiga toxin(Stx-2f) E. coli
- Shigella
- Tellurite resistant Escherichia coli
- Vibrio cholerae
- Vibrio cholerae subspecies
- Vibrio species
- Yersinia enterocolitica

Biothreat

- Bacillus anthracis
- Burkholderia mallei
- Burkholderia pseudomallei
- Chlamydophila psittaci
- Clostridium perfringens species
- Coxiella burnetii
- Cryptosporidium
- Escherichia coli 0157:H7
- Francisella tularensis
- H1N1 influenza
- Marburgvirus
- Rift Valley Fever Virus
- Toxigenic subspecies of Vibrio cholerae
- Vaccinia virus
- Yersinia pestis

Vector-borne diseases

- African Trypanosomiasis
- Anaplasma phagocytophilum
- Borrelia afzelii
- Borrelia burgdorferi
- Borrelia garinii
- Chikungunya Virus
- Coxiella burnetii
- 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
- St. Louis encephalitis virus
- Tick-borne Encephalitis Virus
- Trypanosoma cruzi
- Trypanosoma evansi
- Wesselsbron Virus
- West Nile Virus
- Western equine encephalomyelitis virus
- Yellow Fever Virus
- Zika Virus

Meningitis

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

Periodontal infections

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

Human parasites

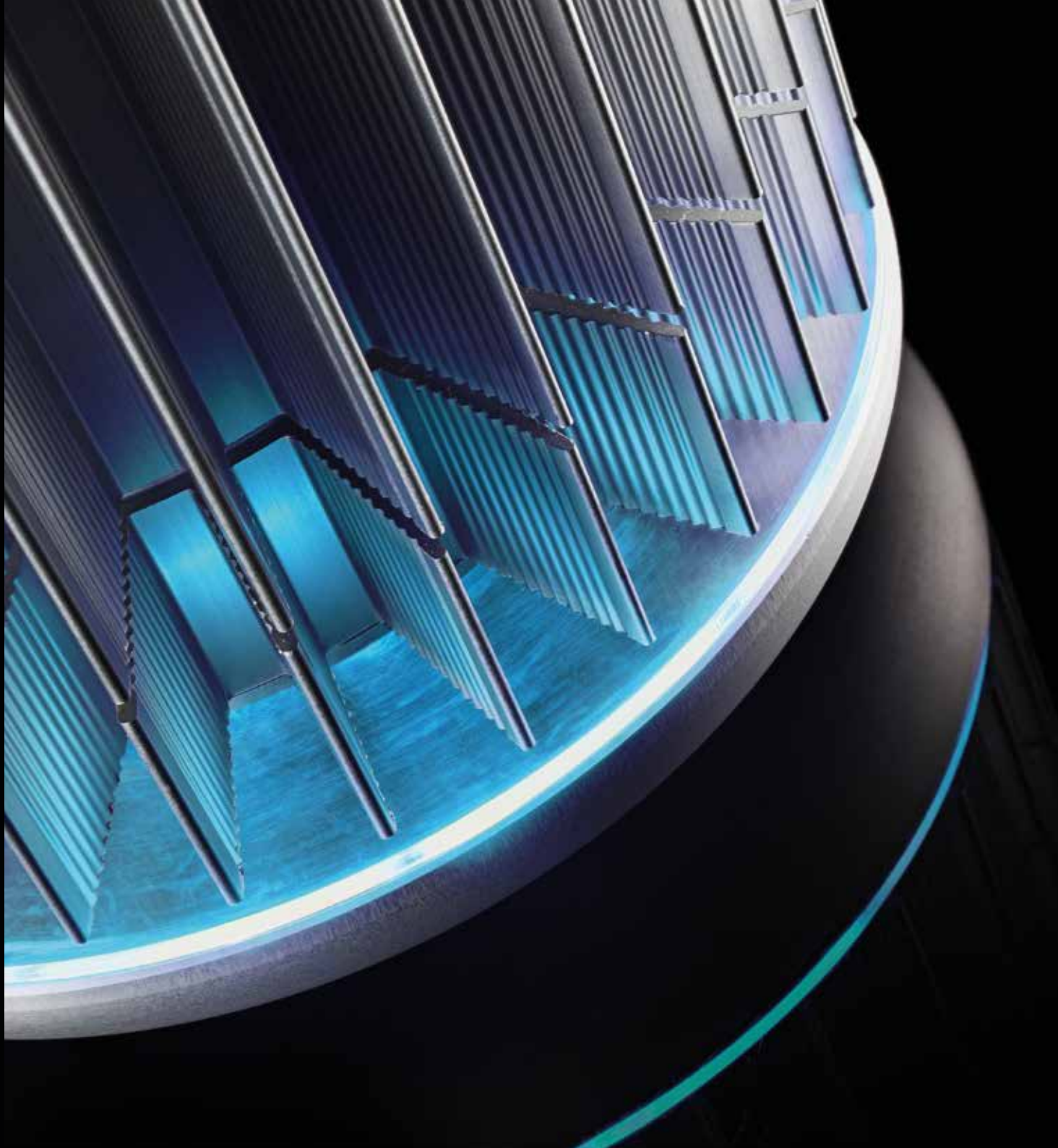
- Bacillus Ascaris lumbricoides/ascaris suum.
- Acanthamoeba species
- Balamuthia mandrillaris
- Cystoisospora belli
- Entamoeba histolytica
- Giardia intestinalis
- Leishmania infantum
- Leishmania major
- Leishmania species
- Leishmania tropica
- Naegleria species
- Plasmodium falciparum
- Plasmodium knowlesi
- Plasmodium malariae
- Plasmodium ovale
- Plasmodium species
- Plasmodium vivax
- Schistosoma haematobium
- Schistosoma mansoni
- Toxoplasma gondii
- Trypanosoma cruzi
- Trypanosoma evansi
- Ureaplasma parvum

Others

- Acinetobacter baumannii
- Aspergillus fumigatus
- Aspergillus species
- Bacillus anthracis
- Bacillus atrophaeus
- Bartonella henselae
- BK Polyomavirus
- Brucella abortus
- Brucella genus
- Bundibugyo Ebola Virus
- Burkholderia cepacia complex
- Burkholderia mallei
- Burkholderia pseudomallei
- Campylobacter fetus
- Campylobacter fetus subspecies venerialis
- Chaoyang virus
- Chlamydophila abortus
- 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 bieneusi
- Francisella tularensis
- Fungi Kingdom
- Fusarium
- Hand, foot and mouth disease
- Human Enterovirus species
- Human Measles Virus
- Human Parvovirus B19
- Human polyomavirus 12
- Human T-lymphotropic virus Type 2
- Human T-lymphotropic virus Type I
- Klebsiella oxytoca
- Klebsiella pneumoniae
- Lactobacillus plantarum
- Legionella species
- Leprosy
- Lyme disease
- Marburgvirus
- Merkel cell polyomavirus
- Methicillin-resistant Staphylococcus aureus
- MRSA-SCC mec type IVa
- MRSA-Staphylococcal cassette chromosome mec
- Mumps virus
- Mycobacterium marinum & Mycobacterium ulcerans
- Mycoplasma fermentans
- Mycoplasma hominis
- Mycoplasma orale
- Orf
- Pneumocystis jirovecii
- Proteus mirabilis
- Pseudomonas aeruginosa
- Rabies Virus
- Reston ebola virus
- Rubella virus
- Serratia marcescens
- Simian Virus 40
- Sin Nombre Virus
- St Louis Polyomavirus
- 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
- Trichodysplasia spinulosa associated polyomavirus
- Tsukamurella inchonensis
- Yersinia pestis
- Zaire ebola virus

Can't find what you're looking for?
New kits on demand

enquiry@primerdesign.co.uk



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 a huge range of tests for human pathogen detection.

Virus: Screen for HPV in a blood bank setting; quantify HCV; detect Ebola and many more viral targets.

Bacteria: Detect hospital super bugs quickly and efficiently; confirm the presence of TB, identify a salmonella infection…and much more.

Fungi: Precise detection of early stage Aspergillus infection, screening for Candidiasis, Ringworm identification and more.

Parasites: Test for Malaria in the field, identify Schistosomiasis, detect Giardia Lamblia and many more parasitic species.

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?

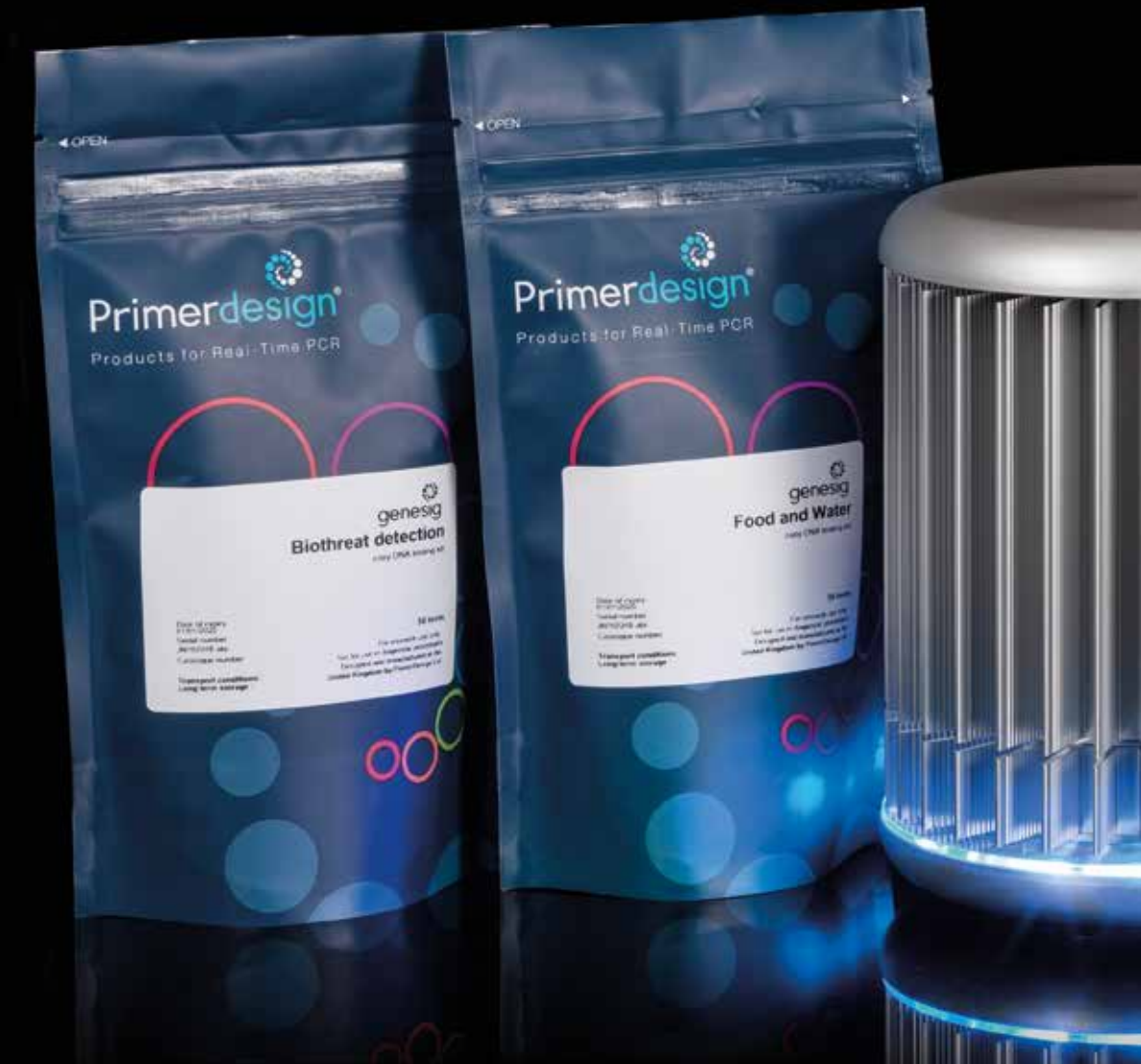
Yes! If you don't have a laboratory it really doesn't matter. The instrument is designed to be used by anyone, anywhere. There is no complex programming or data analysis required. All of that is taken care of by our clever software. All you get is the answers to the questions you ask.

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

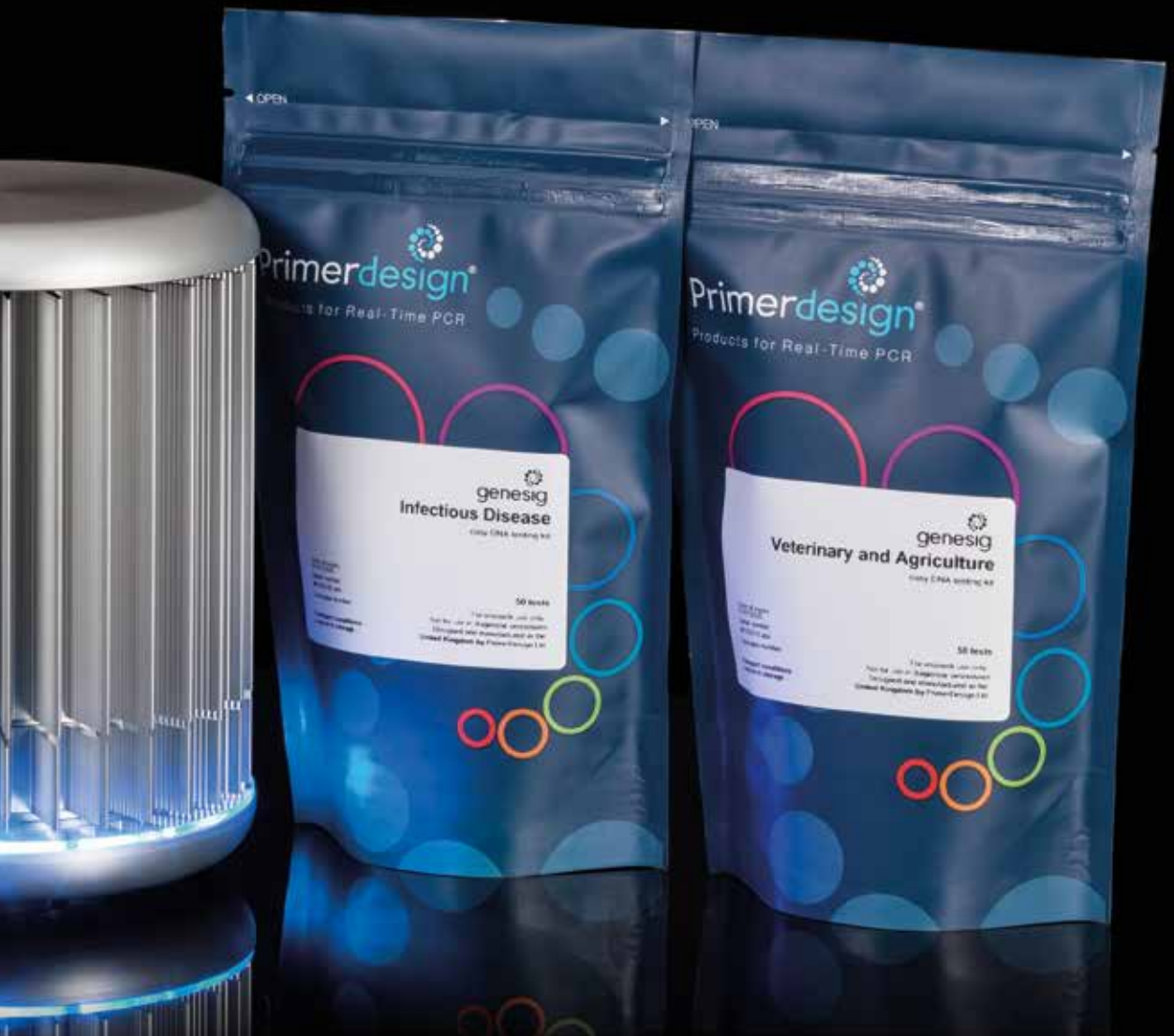


What is a genesig easy kit?

genesig is a catalogue of DNA testing kits for a range of applications in human pathogen screening. 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)



The genesig® **easy DNA/RNA Extraction Kit**

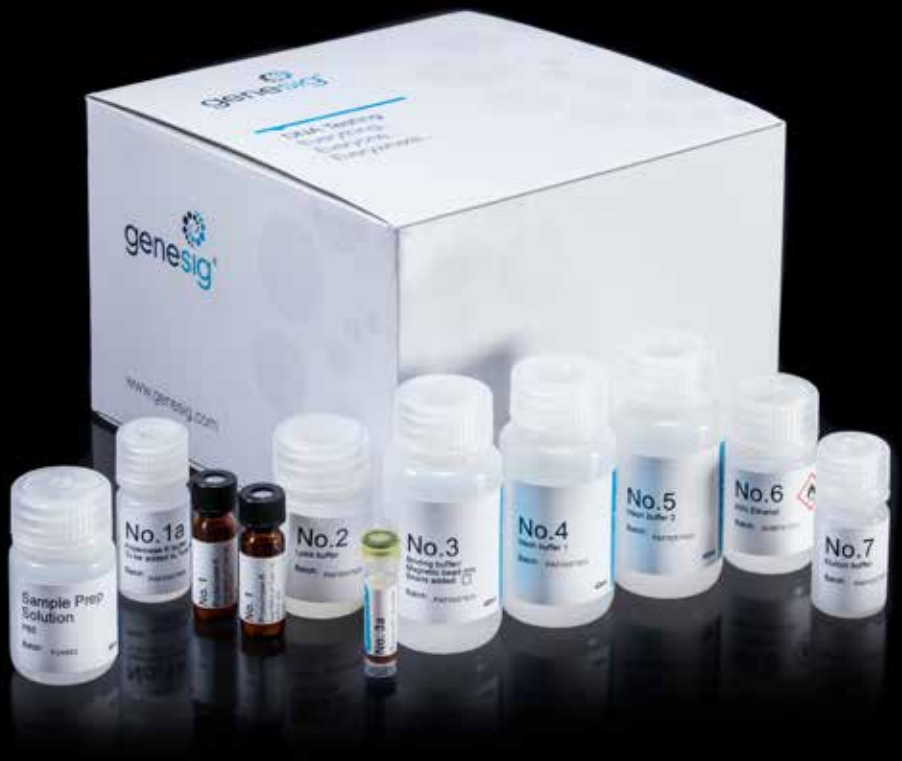
Easy extraction from virtually any sample type

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 minute 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

- Whole blood
- Serum
- Plasma
- Saliva
- Sputum
- Faeces
- Urine
- Tissue
- Bacterial culture
- More…

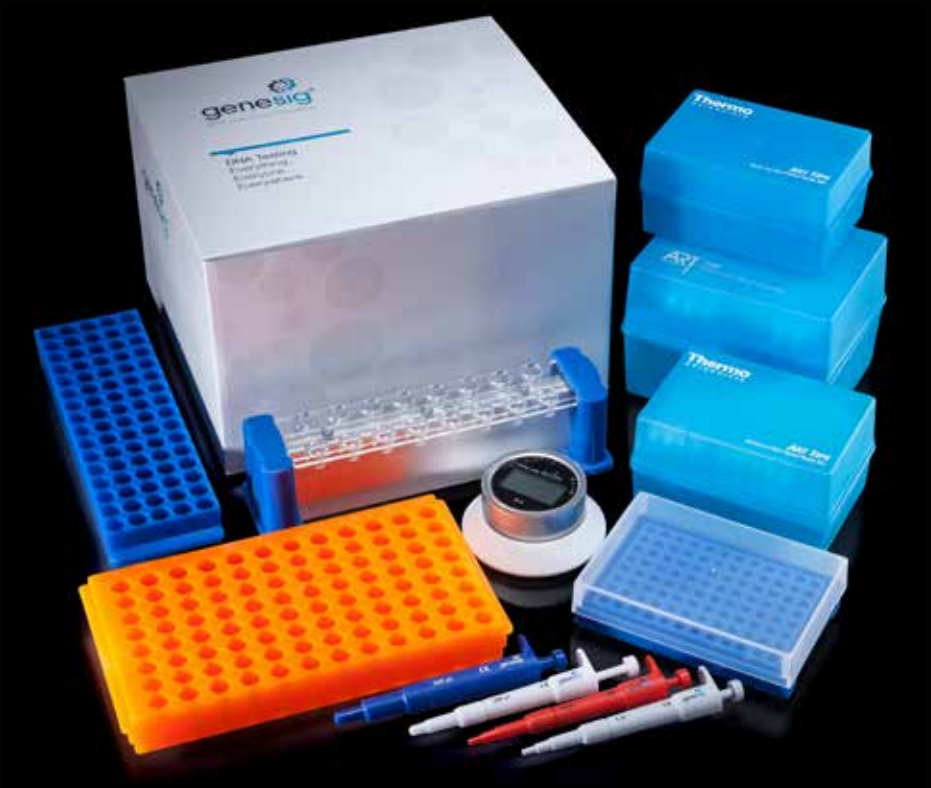


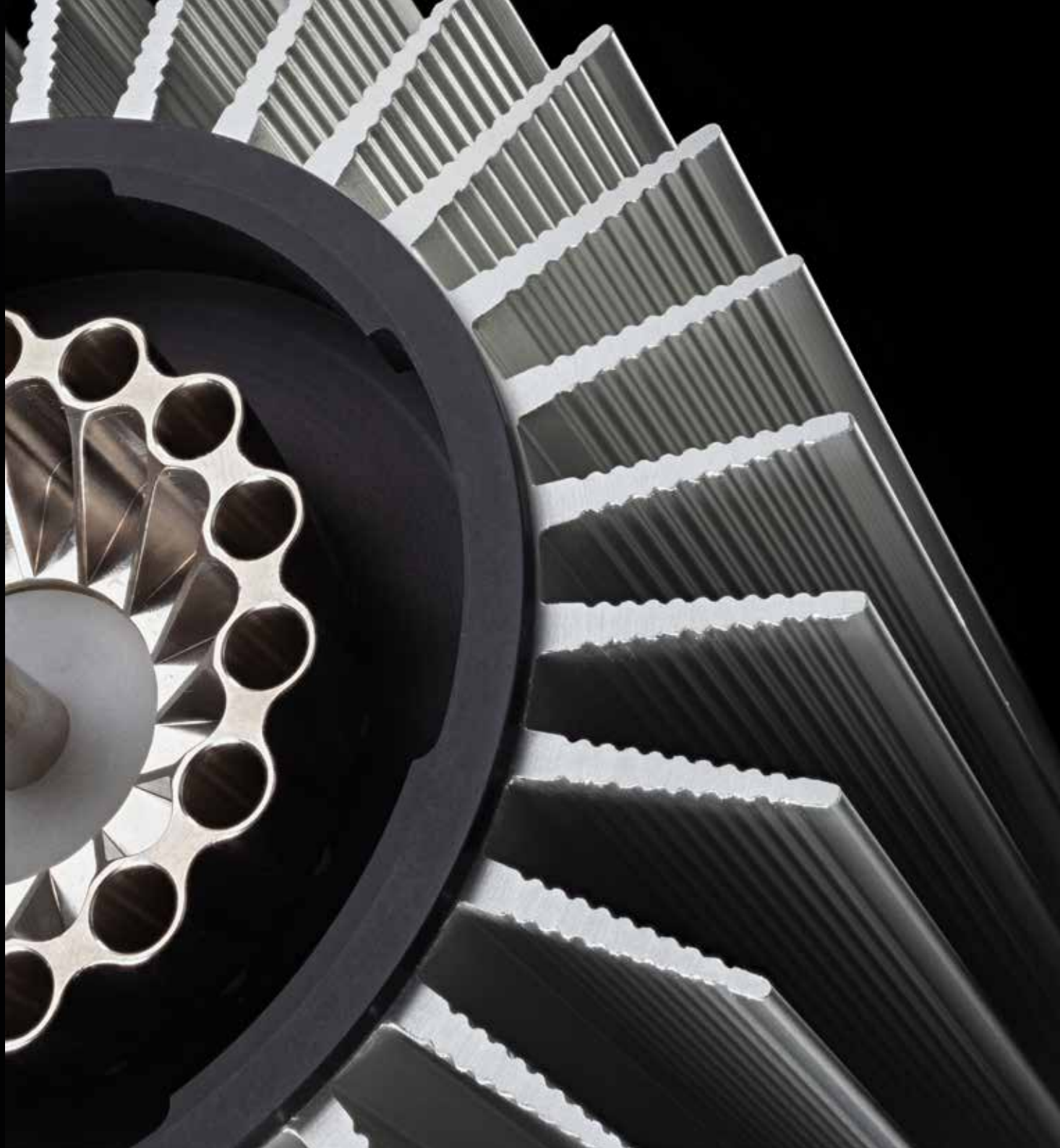
The genesig® **Lab-in-a-box**

Create a lab for anyone, anywhere

Even if you've never performed a DNA 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





The genesig® q16 **Technical Specifications**

The q16 is a closed system designed to provide an incredibly simple user experience with fully automated data calling. It will not operate successfully with kits other than the genesig easy kit range.

- 16 Wells
  - 20ul reaction volume

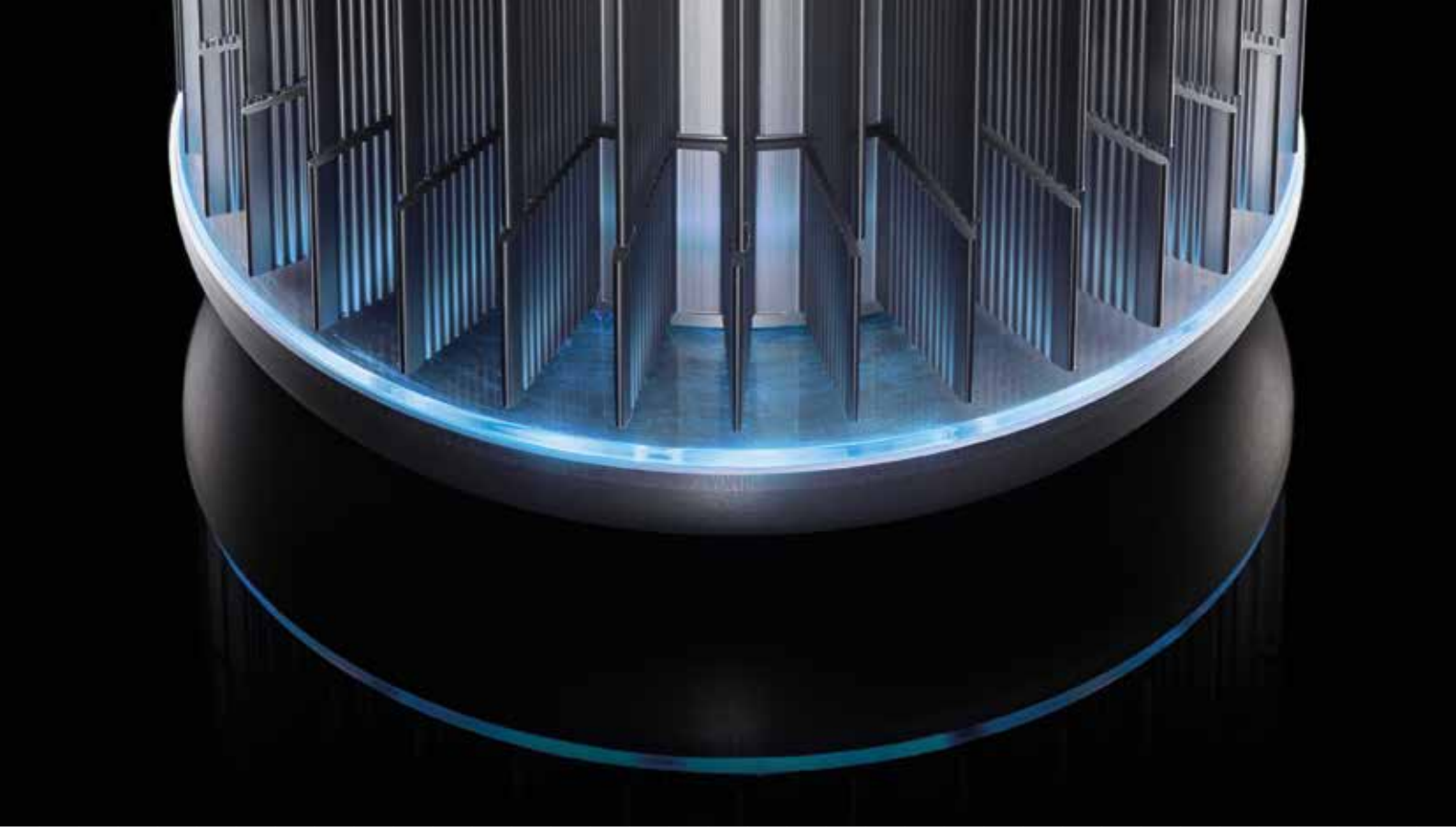
- Peltier thermal control
  - 3°C/s heating
  - 2°C/s cooling
  - Thermal uniformity +- 0.1°C range
  - Thermal accuracy +- 0.25°C

- LED excitation
- CMOS detection
  - Multiplex detection of target and internal control via FAM and VIC channels

- 160mm Height
- 120mm Diameter
- 2kg weight

- 90W power consumption

- No moving parts
- Silent operation
- Operate from PC, Mac, via network, or stand alone with a USB drive
- Extraordinary well-to-well reproducibility



For more information please visit www.diec-america.com

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

Primerdesign®

D.I. Engineering Corporation of America
5025 Kipling St. Suite 200
Wheat Ridge, CO 80033

Telephone: +1 (303) 231-0045