PCRmax

A Bibby Scientific Company

Alpha Cycler

Endpoint PCR range

Speed. Confidence. Value. Sensitivity. Performance.

PCRmax Alpha Cyclers

The PCRmax Alpha Cyclers are developed to deliver not only the best quality data you can expect from a thermal cycler but also to innovate and exceed the high standards expected by the community.

Alpha Cycler AC-1

The single block Alpha Cycler 1 (AC-1) is a compact and feature driven entry level PCR machine with ease of use and performance at its core. Alpha Cycler software has features such as recently used Programs; allowing users to quickly access their most commonly used protocols without the need to navigate through folders to find it, individual user logins; with protected protocols as-well-as allowing users' access to temperature logs after each run to monitor the state of the system.

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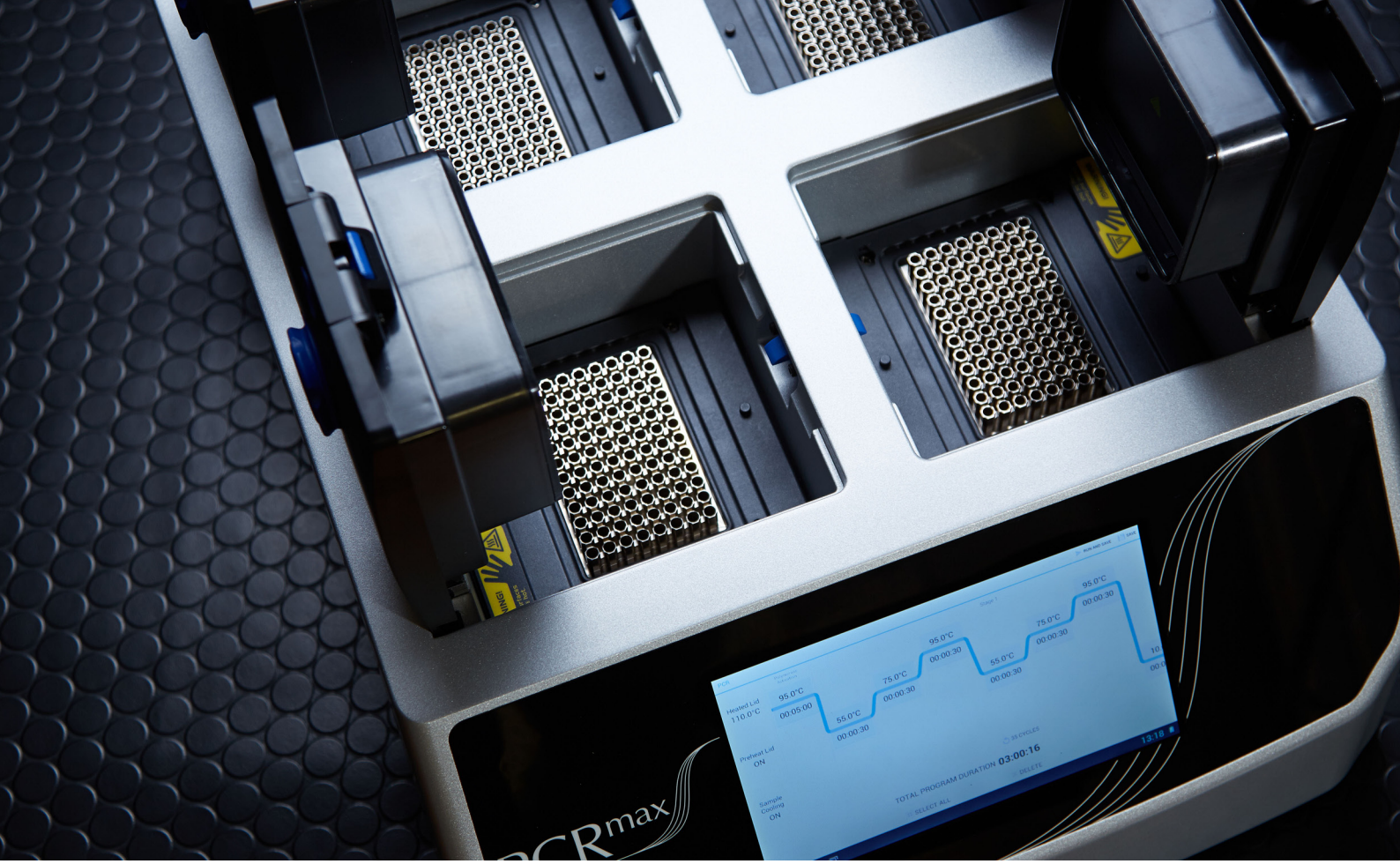
AC-1 Key features

- Active Sample cooling - For sharper amplification and minimal non-specific amplification
- Program Wizard - Generate a protocol specific to your sequence, template source and amplicon length in seconds
- Report generated on run conditions and state following completion of protocol
- Gradient - Allowing for simplified temperature optimisation, no matter the block chosen
- 96/384 well formats - Flexibility for any scale and user needs
- USB connectivity - To retrieve system information and easily transfer protocols between systems
- Android driven 7" tablet interface - Quad core speed and excellent connectivity and feel



Alpha Cycler AC-4

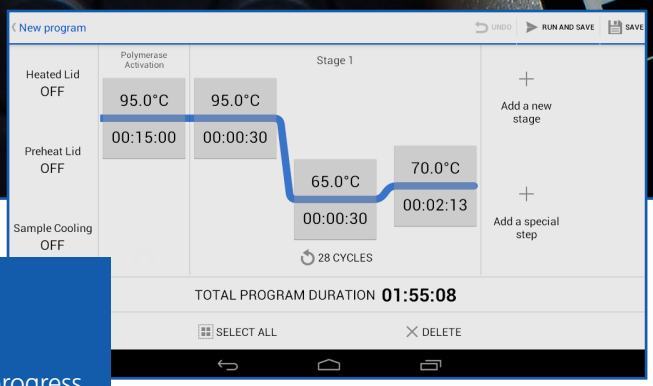
The Alpha Cycler 4 (AC-4) is the only true fully independently controllable multi-block thermal cycler available today. The system can be specified in any combination of 96 and 384 well formats across its four bays. Alpha Cycler software allows the user to quickly access their most commonly used protocols without the need to navigate through folders to find it, individual user logins; with protected protocols as-well-as allowing users' access to temperature logs after each run to monitor the state of the system.

AC-4 Key features

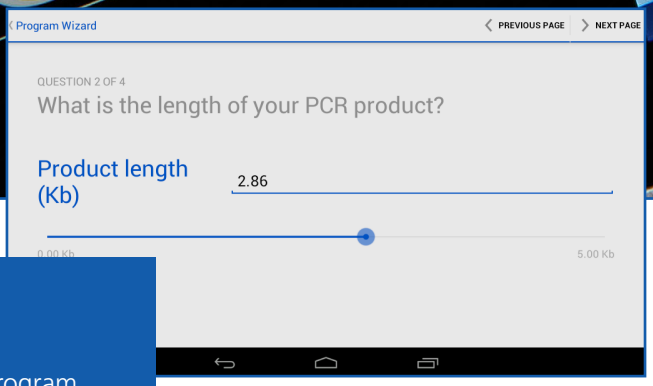
- Scalable - Chose from any combination of 96 or 384 well blocks
- Compact - Save precious labspace by condensing four truly independent blocks into one chassis with no networking issues or connectivity concerns
- Active Sample cooling - For sharper amplification and minimal non-specific amplification
- Program Wizard - Generate a protocol specific to your sequence, template source and amplicon length in seconds
- Gradient - Allowing for simplified temperature optimisation, no matter the block chosen
- Report generated on run conditions and state following completion of protocol
- USB connectivity - To retrieve system information and easily transfer protocols between systems
- Android driven 10" tablet interface - Quad core speed and excellent connectivity and feel

Interface

The Alpha Cycler interface is Android based and runs though a large 7" (AC-1) or 10" (AC-4) HD touchscreen for responsive control of the software. Providing a familiar premium experience on all instruments in the range. Whether you process a few samples a week or require multi-block instrumentation for high throughput, the interface offers the same look and feel no matter the task.



Live progress view



Program Wizard

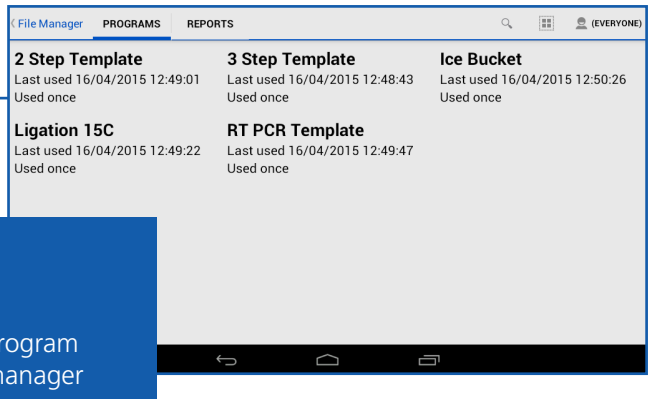
Program Wizard

The Alpha Cycler systems also contain a novel Program wizard which allows users to define a protocol based specifically off their primer sequence and template source. Primer sequences or Tms are inputted, amplicon length and source defined and the on board algorithm generates an optimised protocol for your assay.

- Let the Alpha Cyclers Program wizard optimise your reaction for you.
- Simply input the forward and reverse primer sequences, define the amplicon length and source of the template and the built in and validated algorithms will define a bespoke protocol for your target.
- Program Wizard is an excellent way to transition over to the Alpha Cycler range and a quick way to optimise your new assays.
- Program wizard even allows for high specificity touch down PCR and will accommodate for GC/AT imbalances in your target sequence to get optimal Tms and hold times.

Program storage

On the home screen of all Alpha cycles is the recent Programs list allowing users to access and run their most commonly used Programs in two taps of the screen. No need at all to access the systems memory or hunt though files, just select, confirm and run.



Program manager

Personalised login

AC-4 Multi-Block control

Reporting

What do you want to know from your PCR machine? When its done, when its going to finish and is there a problem. All of these things will be reported out of the Alpha Cycler to your mobile (Android, iOS or Windows) or hand held device simply by scanning the QR code displayed on the Alpha Cycler, allowing users to monitor there run without needing to be connected to a network and conveniently though there own mobile device.

Further monitoring/reports

- Temperature logs of every run
- Completion status
- Full screen timer to easily check remaining time

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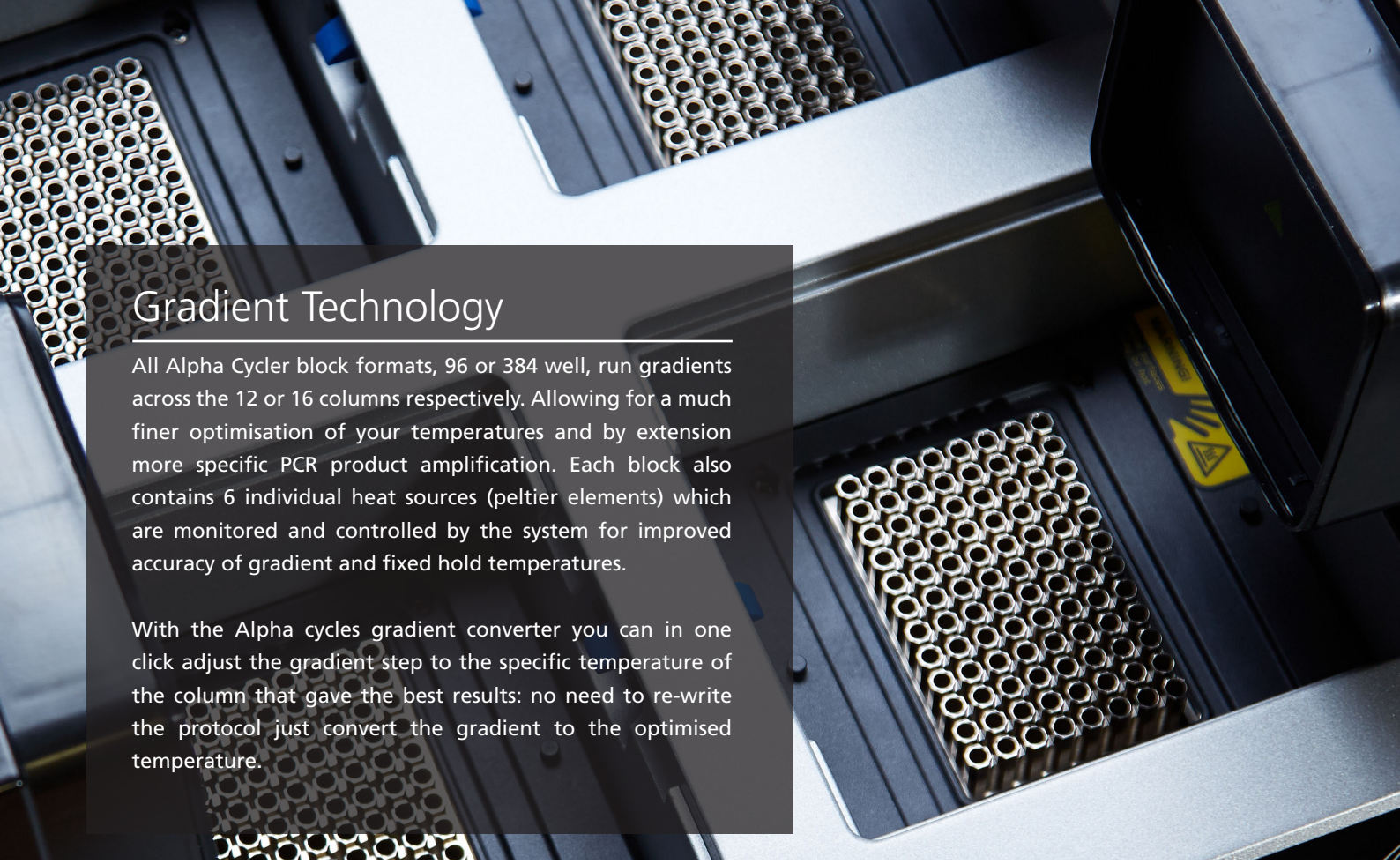
USB Connectivity

Both Alpha Cyclers can retain approximately 1000 reports for reviewing at a later date. Alternatively the unit has USB ports for connection to flash drive or PC, so the files can be more permanently stored as a long term record. The USB can also be used to store and transport protocols between systems.



Gradient Technology

All Alpha Cycler block formats, 96 or 384 well, run gradients across the 12 or 16 columns respectively. Allowing for a much finer optimisation of your temperatures and by extension more specific PCR product amplification. Each block also contains 6 individual heat sources (peltier elements) which are monitored and controlled by the system for improved accuracy of gradient and fixed hold temperatures.

With the Alpha cycles gradient converter you can in one click adjust the gradient step to the specific temperature of the column that gave the best results: no need to re-write the protocol just convert the gradient to the optimised temperature.

Active Sample Cooling

Active Sample Cooling (ASC) is an approach which the Alpha Cycler takes to reduce non-specific amplification in your PCR reactions.

Active sample cooling can all but stop the formation of primer dimers early in cycling. When even a very small number of primer dimers occur early in a reaction these will often be preferentially amplified over your target as PCR will preferentially amplify these shorter fragments over the longer target amplicon, wasting components needed to generate your target thereby reducing your yields.

ASC works by simply chilling the block to 4 degrees and holding it there until the heated lid gets to temperature. Other systems often allow the heated lid to pollute your samples with heat allowing the primer dimers to form early in cycling and these can amplify through the remaining cycles giving the characteristic fuzzy bands at the bottom of your gel.

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Also available

Gamma Cooling Block

- Maximum temperature range 0°C to 40°C *
- Count up and count down timer
- Temperature displayed in °C or °F
- Buzzer indicates reaching the set temperature and the end of the elapsed time
- Holds 2 aluminium insert blocks

* Please note the primary design of PCRmax Gamma is to maintain biological samples safely between 4 and 37°C. PCRmax Gamma will achieve any temperature between 4 and 37°C within 30 minutes in an ambient temperature of 20°C. PCRmax Gamma will also reach 0°C or 40°C, but this may take several hours. Reaching 0°C can be speeded up by pre-cooling the aluminium blocks before use.

Also available

PCRmax Eco 48 Real time qPCR system

The PCRmax Eco 48 real time PCR system is a high specification, economically priced real time thermal cycler that accommodates a unique 48-well polypropylene PCR plate utilising the same geometry as standard 384-well plates, but only 1/8 of the size. This enables users to dramatically reduce the qPCR reagent volumes compared to traditional 96-well instruments, saving users precious sample, whilst still producing a strong fluorescence signal. Minimizing the plate size also significantly improves thermal uniformity. A minimum volume of 5µl is validated, resulting in a more efficient use of expensive and 'hard to acquire' template DNA samples.

The Eco 48 Real-time system offers the qPCR capabilities of larger instruments in a compact, accurate footprint. Innovative features include a precise thermal system for unrivalled temperature control, an advanced optical system for highly sensitive fluorescence detection, a 48-well plate for flexible sample throughput, and intuitive, icon-driven software for error-free instrument operation.

Key features

- MIQE compliant.
- HRM functionality is provided as standard and can discriminate class IV SNP 99.9% of the time.
- The Eco 48 can utilise four colours for easy multiplexing.
- Industry leading ±0.1°C temperature uniformity (recorded at 95°C no settle time).
- High uniformity provides high quality data.
- Fast cycling enables several experiments per day, all at an economical price.
- Fastest block-based real-time PCR system with the ability to run 40 cycles in 20 minutes (or less when optimised).
- The PCRmax Eco 48 is an open platform that can utilise any chemistry, dye or PCR reagent.
- Calibrated for SYBR®, FAM™, HEX™, VIC™, ROX™ and Cy®5 fluorescent dyes.
- Easy to use software, streamlined for novices and experts.
- No need to run triplicates, to compensate for poor thermal uniformity of block.

Do more, with less

Results from multiple instruments can be combined together

Eco 48 wells
HIGH uniformity - Run **duplicates**

±0.1°C uniformity means Eco 48 requires fewer replicates than a conventional 96 well system

24 samples
Run time **40 minutes**

The Eco 48 is capable of running 40 cycles in 40 minutes.

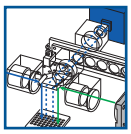
36 samples
per hour

Fewer replicates and faster cycling allows Eco 48 to process more samples than a standard 96 well system.

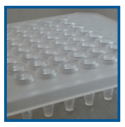
Conventional 96 wells
LOW uniformity - Run **triplicates**

32 samples
Run time **1 hour 20 minutes**

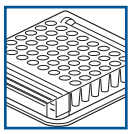
24 samples
per hour



Sensitive optical system delivers precise detection for a range of fluorophores



Convenient 48-well format meets the throughput needs of most researchers



Unique thermal system provides unmatched temperature control for accurate results

Technical Specification

Unit	AC-1	AC-4
Format:	Single block	Quad block
Block Options:	96 or 384 well format	96 or 384 well format (All 96 or all 384, 96 and 3 x 384)
Maximum heating rate:	3.4°C per second	3.4°C per second
Block temperature range:	10°C to 100°C (4°C final hold)	10°C to 100°C (4°C final hold)
Block uniformity at 55°C:	± 0.3°C	± 0.3°C
Temperature accuracy at 55°C:	± 0.25°C	± 0.25°C
Gradient:	Yes (on all formats)	Yes (on all formats)
Maximum Gradient:	29°C	29°C
Minimum Gradient:	1°C	1°C
Maximum number of programs stored:	1000	1000
Maximum fan noise:	50dB	50dB single block running 55-58db four blocks running
Peltier element type:	6	6
Adjustable heated lid temperature:	35°C to 115°C or off	35°C to 115°C or off
Heated lid pressure:	Adjustable	Adjustable
Software platform:	Android	Android
Program interface:	7" inch 1080p HD	10" inch 1080p HD
Data transfer:	USB port	USB port
Auto re-start on power failure:	Yes	Yes
Dimensions (L x W x H) in mm:	430 x 260 x 200	700 x 535 x 200
Weight:	11.8kg	45kg
Voltage:	100-230, 50-60Hz	100-230, 50-60Hz
Power:	450W	450W
Electricity (standard 30 cycle program)	0.3 kWh	0.3 kWh

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PCRmax

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Delta Seek
qPCR Reagent Kits

Speed. Confidence. Value. Sensitivity. Performance.

DeltaSeek kits from PCRmax

The Delta Seek detection kits utilise the sensitivity and speed of qPCR to get the most accurate data as quickly as possible. Each kit is specifically designed by our bioinformatics team to ensure the broadest possible detection profile and detection of all clinically relevant strains and subtypes. All test kits are validated in house on multiple qPCR platforms to ensure cross platform functionality.

Kits come with sufficient controls to reduce the chances of making the wrong call and positive copy number standard to allow for easy quantification. Delta Seek kits can also by generated specifically for your test of interest. If the kit is not in our database currently we can easily make the kit you wish if sequence data is available.

DNA Kits

Each DeltaSeek DNA reagent kit employs the same experimental setup, amplification protocol and interpretation of results.

Plate setup includes:

1. Internal control DNA (read through VIC) and samples (read through FAM).
2. Beta-actin endogenous control (read through VIC).
3. Positive control, also used for standard curve (read through FAM).
4. Negative control (read through FAM).

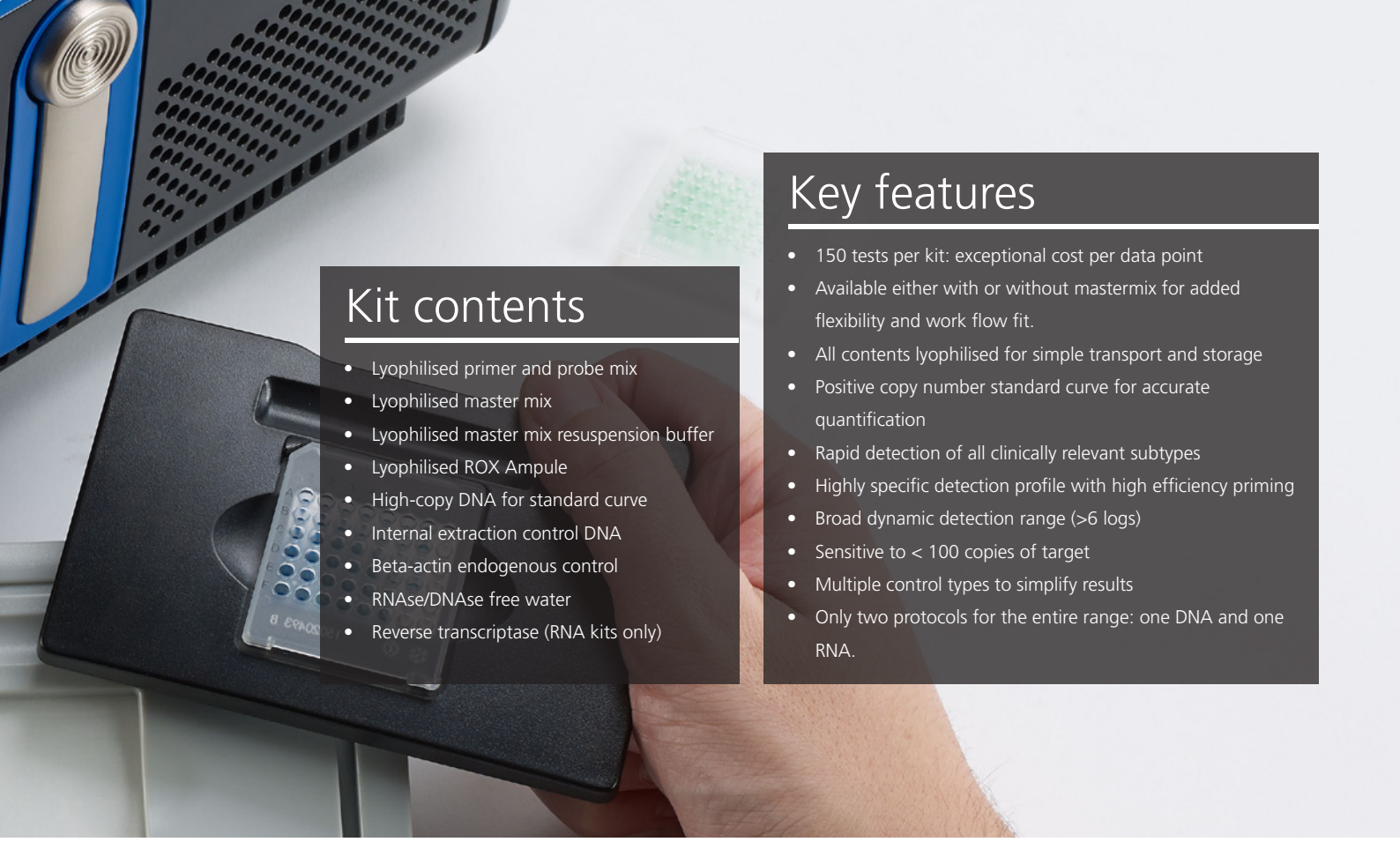
DNA Protocol

	Step	Time	Temperature
1 cycle	Enzyme activation	10 minutes	95°C
50 cycles	Denaturation	10 seconds	95°C
	Data collection*	60 seconds	60°C

* Fluorogenic data for the pathogen and beta-actin endogenous control is collected during this step through the FAM channel. Fluorogenic data for the internal extraction control should be collected during this step through the VIC channel (or the Cy5 channel if using a Roche LightCycler 1.0 or 1.5)

DNA Results

Pathogen	Internal control	Negative control	Positive control	Interpretation
+	+	-	+	Positive result
+	-	-	+	
-	+	-	+	Negative result
-	-	-	-	Experiment fail
+	+	+	+	



Kit contents

- Lyophilised primer and probe mix
- Lyophilised master mix
- Lyophilised master mix resuspension buffer
- Lyophilised ROX Ampule
- High-copy DNA for standard curve
- Internal extraction control DNA
- Beta-actin endogenous control
- RNAse/DNAse free water
- Reverse transcriptase (RNA kits only)

Key features

- 150 tests per kit: exceptional cost per data point
- Available either with or without mastermix for added flexibility and work flow fit.
- All contents lyophilised for simple transport and storage
- Positive copy number standard curve for accurate quantification
- Rapid detection of all clinically relevant subtypes
- Highly specific detection profile with high efficiency priming
- Broad dynamic detection range (>6 logs)
- Sensitive to < 100 copies of target
- Multiple control types to simplify results
- Only two protocols for the entire range: one DNA and one RNA.

RNA Kits

Each DeltaSeek RNA reagent kit employs the same experimental setup, amplification protocol and interpretation of results.

Plate setup includes:

1. Internal control DNA (read through VIC) and samples (read through FAM).
2. Beta-actin endogenous control (read through VIC).
3. Positive control, also used for standard curve (read through FAM).
4. Negative control (read through FAM).

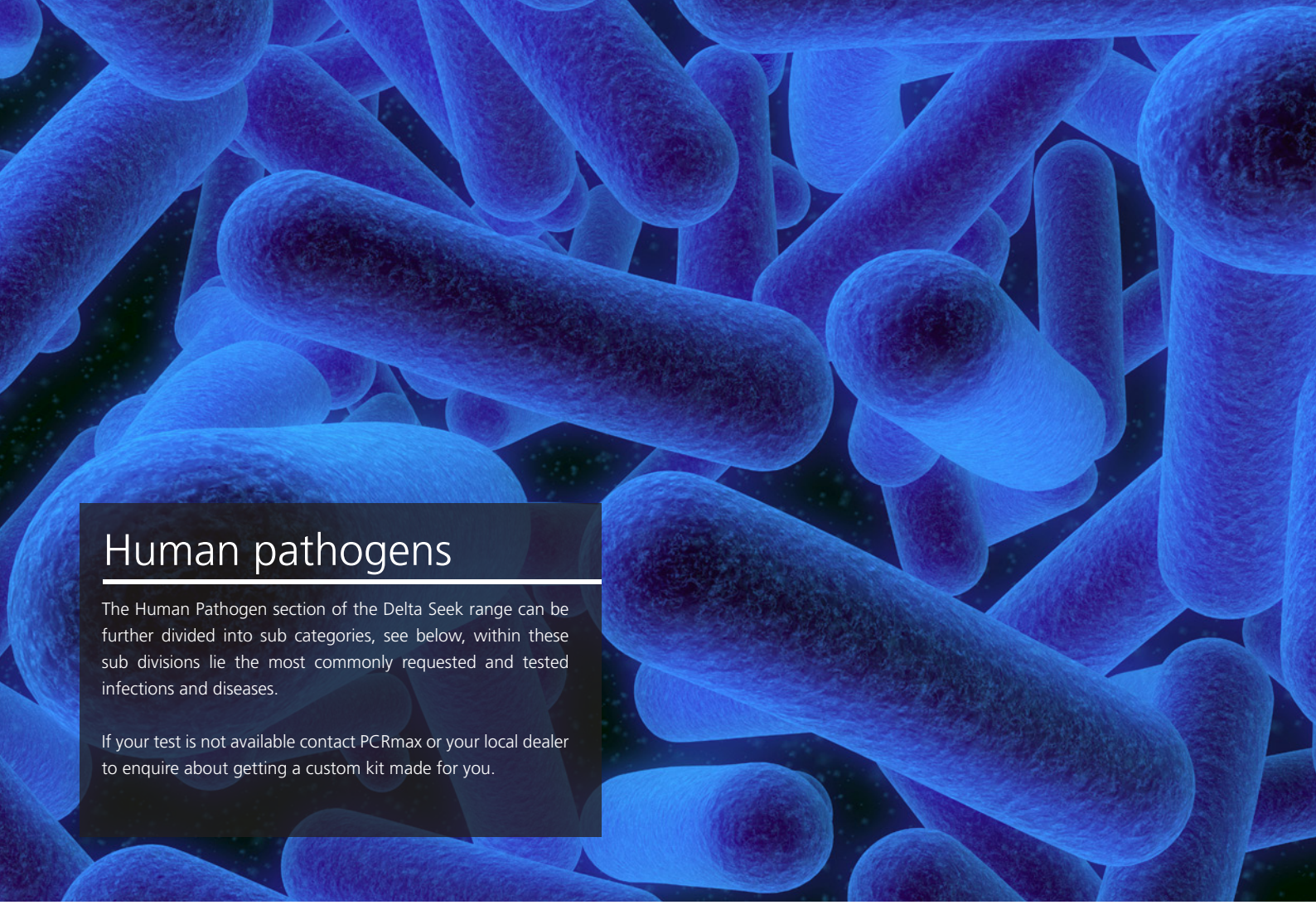
RNA Protocol

	Step	Time	Temperature
1 cycle	Reverse transcription	10 minutes	55°C
	Enzyme activation	8 minutes	95°C
50 cycles	Denaturation	10 seconds	95°C
	Data collection*	60 seconds	60°C

* Fluorogenic data for the pathogen and beta-actin endogenous control is collected during this step through the FAM channel. Fluorogenic data for the internal extraction control should be collected during this step through the VIC channel (or the Cy5 channel if using a Roche LightCycler 1.0 or 1.5)

RNA Results

Pathogen	Internal control	Negative control	Positive control	Interpretation
+	+	-	+	Positive result
+	-	-	+	
-	+	-	+	Negative result
-	-	-	-	Experiment fail
+	+	+	+	



Human pathogens

The Human Pathogen section of the Delta Seek range can be further divided into sub categories, see below, within these sub divisions lie the most commonly requested and tested infections and diseases.

If your test is not available contact PCRmax or your local dealer to enquire about getting a custom kit made for you.

Without Mastermix	With Mastermix	Description
Respiratory Infections		
PTKIT10005	PTKIT10005M	DNA, Adenovirus Type B
PTKIT10006	PTKIT10006M	DNA, Adenovirus Type C
PTKIT10007	PTKIT10007M	DNA, Adenovirus Type F&G
PTKIT10003	PTKIT10003M	DNA, Ajellomyces capsulata
PTKIT11016	PTKIT11016M	DNA, Chlamydophila pneumoniae
PTKIT11017	PTKIT11017M	DNA, Chlamydophila psittaci
PTKIT11015	PTKIT11015M	DNA, Cryptococcus neoformans
PTKIT10028	PTKIT10028M	DNA, Enterobacter cloacae
PTKIT11023	PTKIT11023M	DNA, Geosmithia argillacea
PTKIT10044	PTKIT10044M	RNA, H1N1 influenza
PTKIT11026	PTKIT11026M	RNA, Avian Influenza A virus Subtype H7N9
PTKIT10040	PTKIT10040M	DNA, Haemophilus influenzae
PTKIT10046	PTKIT10046M	DNA, Human Bocavirus genomes
PTKIT10049	PTKIT10049M	RNA, All Group 1 Coronavirus genomes
PTKIT10050	PTKIT10050M	RNA, All Group 2 Coronavirus genomes
PTKIT10035	PTKIT10035M	RNA, Influenza Type A M1
PTKIT10036	PTKIT10036M	RNA, Human Influenza Type A M2
PTKIT10043	PTKIT10043M	RNA, Human Influenza A virus Subtype H1
PTKIT10045	PTKIT10045M	RNA, Human Influenza A virus Subtype H3
PTKIT10037	PTKIT10037M	RNA, Human Influenza Type B
PTKIT10064	PTKIT10064M	RNA, Human Metapneumovirus
PTKIT10066	PTKIT10066M	RNA, Human Parainfluenza virus Type 1
PTKIT10067	PTKIT10067M	RNA, Human Parainfluenza virus Type 2
PTKIT10068	PTKIT10068M	RNA, Human Parainfluenza virus Type 3
PTKIT10069	PTKIT10069M	RNA, Human Parainfluenza virus Type 4A
PTKIT10070	PTKIT10070M	RNA, Human Parainfluenza virus Type 4B
PTKIT10082	PTKIT10082M	DNA, Human Polyomavirus 6
PTKIT10083	PTKIT10083M	DNA, Human Polyomavirus 7
PTKIT10084	PTKIT10084M	DNA, Human Polyomavirus 9
PTKIT10085	PTKIT10085M	RNA, Human Rhinovirus Subtype 14
PTKIT10086	PTKIT10086M	RNA, Human Rhinovirus Subtype 16
PTKIT10087	PTKIT10087M	RNA, Human Rhinovirus Subtype 1B
PTKIT10088	PTKIT10088M	RNA, Human Rhinovirus Subtype 29
PTKIT10089	PTKIT10089M	RNA, Human Rhinovirus Subtype 9
PTKIT10090	PTKIT10090M	RNA, Human Rhinovirus All subtypes (generic)
PTKIT10097	PTKIT10097M	DNA, Klebsiella pneumoniae
PKIT07012	PKIT07012M	DNA, All Legionella species
PTKIT10102	PTKIT10102M	DNA, Legionella pneumophila
PTKIT11027	PTKIT11027M	DNA, Leptospirosis
PTKIT10114	PTKIT10114M	DNA, Merkel cell polyomavirus
PTKIT10115	PTKIT10115M	DNA, Methicillin-resistant Staphylococcus aureus
PTKIT10108	PTKIT10108M	DNA, Moraxella catarrhalis
PKIT08017	PKIT08017M	DNA, Mycobacterium avium subspecies paratuberculosis
PKIT10113	PKIT10113M	DNA, Mycobacterium tuberculosis complex
PTKIT11044	PTKIT11044M	DNA, Mycobacterium avium
PTKIT10113	PTKIT10113M	DNA, Mycobacterium tuberculosis complex
PTKIT10112	PTKIT10112M	DNA, Mycoplasma pneumoniae
KIT10133	PTKIT10133M	RNA, Respiratory Syncytial virus
PTKIT10134	PTKIT10134M	RNA, Respiratory Syncytial virus A
PTKIT10135	PTKIT10135M	RNA, Respiratory Syncytial virus B
PTKIT11035	PTKIT11035M	RNA, SARS coronavirus
PTKIT10100	PTKIT10100M	DNA, Legionella longbeachae
PKIT07017	PKIT07017M	DNA, Simkania negevensis
PTKIT10155	PTKIT10155M	DNA, WU polyomavirus
PTKIT10098	PTKIT10098M	DNA, KI polyomavirus
Sexually transmitted Infections		
PTKIT10016	PTKIT10016M	DNA, Candida albicans
PTKIT10021	PTKIT10021M	DNA, Chlamydia trachomatis
PTKIT10039	PTKIT10039M	DNA, Haemophilus ducreyi
PKIT07008	PKIT07008M	RNA, Hepatitis A virus
PTKIT10047	PTKIT10047M	DNA, Hepatitis B virus
PTKIT10091	PTKIT10091M	DNA, Herpes simplex Type 1 (HHV1)
PTKIT10092	PTKIT10092M	DNA, Herpes simplex Type 1 and 2 (HHV1&2)
PTKIT10093	PTKIT10093M	DNA, Herpes simplex Type 2 (HHV2)

Without Mastermix	With Mastermix	Description
PTKIT10062	PTKIT10062M	RNA, Human Immunodeficiency virus Type 1
PTKIT10063	PTKIT10063M	RNA, Human Immunodeficiency virus Type 2
PTKIT10071	PTKIT10071M	DNA, Human Papillomavirus 11
PTKIT10072	PTKIT10072M	DNA, Human Papillomavirus 16
PTKIT10073	PTKIT10073M	DNA, Human Papillomavirus 18
PTKIT10074	PTKIT10074M	DNA, Human Papillomavirus 31
PTKIT10075	PTKIT10075M	DNA, Human Papillomavirus 33
PTKIT10076	PTKIT10076M	DNA, Human Papillomavirus 45
PTKIT10077	PTKIT10077M	DNA, Human Papillomavirus 52 and 52b
PTKIT10078	PTKIT10078M	DNA, Human Papillomavirus 58
PTKIT10079	PTKIT10079M	DNA, Human Papillomavirus 6
PTKIT10110	PTKIT10110M	DNA, Mycoplasma hominis
PTKIT10119	PTKIT10119M	DNA, Neisseria gonorrhoeae
PTKIT10149	PTKIT10149M	DNA, Treponema pallidum
PTKIT10150	PTKIT10150M	DNA, Trichomonas vaginalis
PTKIT10154	PTKIT10154M	DNA, Ureaplasma urealyticum

Herpes viral Infections

PTKIT10024	PTKIT10024M	DNA, Cytomegalovirus (HHV5)
PTKIT10030	PTKIT10030M	DNA, Epstein Barr virus (HHV4)
PTKIT10091	PTKIT10091M	DNA, Herpes simplex Type 1 (HHV1)
PTKIT10092	PTKIT10092M	DNA, Herpes simplex Type 1 and 2 (HHV1&2)
PTKIT10093	PTKIT10093M	DNA, Herpes simplex Type 2 (HHV2)
PTKIT10057	PTKIT10057M	DNA, Human Herpesvirus 6
PTKIT10056	PTKIT10056M	DNA, Human Herpesvirus 3
PTKIT10058	PTKIT10058M	DNA, Human Herpesvirus 6 variant A
PTKIT10059	PTKIT10059M	DNA, Human Herpesvirus 6 variant B
PTKIT10060	PTKIT10060M	DNA, Human Herpesvirus 7
PTKIT10061	PTKIT10061M	DNA, Human Herpesvirus 8

Hepatitis Infections

PKIT07008	PKIT07008M	RNA, Hepatitis A virus
PKIT10047	PKIT10047M	DNA, Hepatitis B virus
PTKIT10051	PTKIT10051M	RNA, Hepatitis C virus
PTKIT10054	PTKIT10054M	RNA, Hepatitis Delta virus
PKIT07009	PKIT07009M	RNA, Hepatitis E virus

Human Papillomavirus

PTKIT10079	PTKIT10079M	DNA, Human Papillomavirus 6
PTKIT10071	PTKIT10071M	DNA, Human Papillomavirus 11
PTKIT10078	PTKIT10078M	DNA, Human Papillomavirus 58
PTKIT10072	PTKIT10072M	DNA, Human Papillomavirus 16
PTKIT10073	PTKIT10073M	DNA, Human Papillomavirus 18
PTKIT10075	PTKIT10075M	DNA, Human Papillomavirus 33
PTKIT10077	PTKIT10077M	DNA, Human Papillomavirus 52 and 52b
PTKIT10074	PTKIT10074M	DNA, Human Papillomavirus 31
PTKIT10076	PTKIT10076M	DNA, Human Papillomavirus 45

Gastrointestinal infections

PTKIT11006	PTKIT11006M	DNA, Aeromonas hydrophila
PTKIT11003	PTKIT11003M	DNA, Ancylostoma duodenale
PKIT07001	PKIT07001M	DNA, Bifidobacterium bifidum
PKIT06001	PKIT06001M	DNA, Bifidobacterium longum
PTKIT11002	PTKIT11002M	DNA, Blastocystis genus (All species)
PKIT08004	PKIT08004M	DNA, Campylobacter Coli
PKIT08005	PKIT08005M	DNA, Campylobacter Jejuni
PKIT10016	PKIT10016M	DNA, Candida albicans
PKIT07004	PKIT07004M	DNA, All Clostridium perfringens species
PTKIT10017	PTKIT10017M	DNA, Clostridium difficile (toxin A)
PTKIT10018	PTKIT10018M	DNA, Clostridium difficile (toxin B)
PTKIT11018	PTKIT11018M	DNA, Cryptosporidium
PKIT08003	PKIT08003M	DNA, Cyclospora cayetanensis
PKIT07002	PKIT07002M	DNA, Bacillus cereus E33
PKIT10013	PKIT10013M	DNA, All Bacteroides species
PKIT10012	PKIT10012M	DNA, Balamuthia mandrillaris
PKIT10029	PKIT10029M	DNA, Entamoeba histolytica
PKIT10032	PKIT10032M	DNA, All Entamoeba species
PKIT10028	PKIT10028M	DNA, Enterobacter cloacae
PKIT10027	PKIT10027M	DNA, Enterococcus caseliflavus
PKIT07006	PKIT07006M	DNA, Enterococcus faecalis
PKIT07007	PKIT07007M	DNA, Enterococcus faecium
PKIT08013	PKIT08013M	DNA, Enteropathogenic Escherichia coli
PKIT08008	PKIT08008M	DNA, Escherichia coli
PKIT08007	PKIT08007M	DNA, Escherichia coli 0157:H7
PKIT08009	PKIT08009M	DNA, Escherichia coli O104:H4
PKIT08015	PKIT08015M	DNA, Giardia intestinalis
PKIT10041	PKIT10041M	DNA, H Pylori
PKIT10046	PKIT10046M	DNA, Human Bocavirus
PKIT08016	PKIT08016M	DNA, Listeria monocytogenes
PKIT08016	PKIT08016M	DNA, Listeria monocytogenes
PTKIT11031	PTKIT11031M	RNA, Rotavirus A
PTKIT11032	PTKIT11032M	RNA, Rotavirus B
PTKIT11033	PTKIT11033M	RNA, Rotavirus C
PKIT08018	PKIT08018M	DNA, Salmonella enterica
PKIT08010	PKIT08010M	DNA, Shiga toxin (stx1) producing Escherichia coli
PKIT08011	KIT08011M	DNA, Shiga toxin (stx2b) producing Escherichia coli
PKIT05001	PKIT05001M	DNA, All pathogenic Salmonella species
PKIT07020	PKIT07020M	DNA, All Vibrio species
PKIT02002	PKIT02002M	DNA, Toxigenic subspecies of Vibrio cholerae
PKIT07019	PKIT07019M	DNA, All Vibrio cholerae subspecies
PKIT02003	PKIT02003M	DNA, Yersinia enterocolitica
PTKIT10121	PTKIT10121M	DNA, Oxalobacter formigenes

Vector-borne diseases

PTKIT11004	PTKIT11004M	DNA, African Trypanosomiasis
PTKIT11007	PTKIT11007M	DNA, Anaplasma phagocytophilum
PTKIT10008	PTKIT10008M	DNA, Borrelia afzelii
PTKIT10009	PTKIT10009M	DNA, Borrelia burgdorferi
PTKIT10011	PTKIT10011M	DNA, Borrelia garinii
PTKIT10023	PTKIT10023M	RNA, Chikungunya virus
PKIT08002	PKIT08002M	DNA, Coxiella burnetii
PKIT08006	PKIT08006M	RNA, Crimean-Congo Haemorrhagic Fever virus
PTKIT10025	PTKIT10025M	RNA, Dengue virus
PTKIT10026	PTKIT10026M	RNA, Dengue virus Type 3
PTKIT10031	KIT10031M	DNA, All Ehrlichia species
PKIT08014	PKIT08014M	DNA, Francisella tularensis
PKIT01001	PKIT01001M	QPCR Kit, RNA, Japanese Encephalitis virus
PTKIT10099	PTKIT10099M	DNA, Leishmania infantum and donovani
PTKIT10101	PTKIT10101M	DNA, Leishmania major
PTKIT10103	PTKIT10103M	DNA, Leishmania tropica
PTKIT10104	PTKIT10104M	DNA, Lactobacillus genus
PTKIT10105	PTKIT10105M	DNA, All Leishmania species
PTKIT10107	PTKIT10107M	DNA, Lyme disease
PKIT10122	PKIT10122M	DNA, Plasmodium falciparum
PTKIT10129	PTKIT10129M	DNA, Plasmodium ovale
PTKIT10130	PTKIT10130M	DNA, Plasmodium vivax
PTKIT10126	PTKIT10126M	DNA, Plasmodium knowlesi
PTKIT10127	PTKIT10127M	DNA, Plasmodium malariae
PKIT10131	PKIT10131M	DNA, All Plasmodium species
PTKIT10132	PTKIT10132M	DNA, Rickettsia (All species)
PTKIT10141	PTKIT10141M	RNA, Sandfly Fever Sicilian virus
PTKIT10152	PTKIT10152M	RNA, Tick-borne Encephalitis virus
PTKIT10145	PTKIT10145M	DNA, Trypanosoma cruzi
PKIT12080	PKIT12080M	DNA, Trypanosoma equiperdum
PTKIT11043	PTKIT11043M	RNA, Wesselsbron virus
PKIT01003	PKIT01003M	RNA, West Nile virus
PKIT01002	PKIT01002M	RNA, Western equine encephalomyelitis virus
PTKIT10156	PTKIT10156M	RNA, Yellow Fever virus

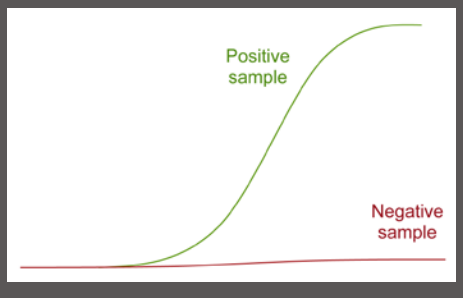
Meningitis

PKIT10024	PKIT10024M	DNA, Cytomegalovirus (HHV5)
PTKIT10120	PTKIT10120M	DNA, All Neisseria meningitidis
PTKIT10033	PTKIT10033M	RNA, All Human Enterovirus species
PKIT10030	PKIT10030M	DNA, Epstein Barr virus (HHV4)
PKIT10040	PKIT10040M	DNA, Haemophilus influenzae
PKIT10091	PKIT10091M	DNA, Herpes simplex Type 1 (HHV1)
PKIT10092	PKIT10092M	DNA, Herpes simplex Type 1 and 2 (HHV1&2)
PKIT10093	PKIT10093M	DNA, Herpes simplex Type 2 (HHV2)
PKIT11027	PKIT11027M	DNA, Leptospirosis
PTKIT11038	PTKIT11038M	DNA, Streptococcus pneumoniae

Without Mastermix	With Mastermix	Description
Periodontal infections		
PKIT10001	PKIT10001M	DNA, Aggregatibacter actinomycetemcomitans
PKIT10123	PKIT10123M	DNA, Porphyromonas gingivalis
PKIT10124	PKIT10124M	DNA, Prevotella intermedia
PKIT10140	PKIT10140M	DNA, Streptococcus mutans
PKIT11040	PKIT11040M	DNA, Streptococcus salivarius
PKIT10147	PKIT10147M	DNA, Tannerella forsythia
PKIT10146	PKIT10146M	DNA, Treponema denticola
Others		
PKIT10004	PKIT10004M	DNA, All Acanthamoeba species
PKIT10002	PKIT10002M	DNA, Acinetobacter baumannii
PKIT11005	PKIT11005M	DNA, Aspergillus fumigatus
PKIT11008	PKIT11008M	DNA, Aspergillus
PKIT03001	PKIT03001M	DNA, Bacillus anthracis
PKIT11009	PKIT11009M	DNA, Bartonella henselae
PKIT08001	PKIT08001M	DNA, Brucella abortus
PKIT07003	PKIT07003M	DNA, Brucella genus (All species)
PKIT10010	PKIT10010M	DNA, Burkholderia cepacia complex
PKIT11001	PKIT11001M	DNA, Burkholderia mallei (with Mastermix)
PKIT11010	PKIT11010M	DNA, Burkholderia pseudomallei
PKIT11012	PKIT11012M	DNA, Campylobacter fetus
PKIT11013	PKIT11013M	DNA, Campylobacter fetus subspecies venerialis
PKIT10022	PKIT10022M	RNA, Chaoyang virus
PKIT11011	PKIT11011M	DNA, Chlamydophila abortus
PKIT10017	PKIT10017M	DNA, Clostridium difficile (toxin A)
PKIT10018	PKIT10018M	DNA, Clostridium difficile (toxin B)
PKIT11019	PKIT11019M	DNA, Clostridium tetani
PKIT10019	PKIT10019M	DNA, Corynebacterium diphtheriae toxin A&B
PKIT11020	PKIT11020M	RNA, Dobrava-Belgrade virus
PKIT11021	PKIT11021M	DNA, Enterocytozoon bieneusi
PKIT11022	PKIT11022M	DNA, All Encephalitozoon species
PKIT08014	PKIT08014M	DNA, Francisella tularensis
PKIT10038	PKIT10038M	DNA, Fungi Kingdom (including Yeast)
PKIT10055	PKIT10055M	RNA, Hand, foot and mouth disease
PKIT10033	PKIT10033M	RNA, All Human Enterovirus species
PKIT10065	PKIT10065M	RNA, Human Measles virus
PKIT10080	PKIT10080M	QPCR Kit, DNA, Human Parvovirus B19
PKIT10081	PKIT10081M	DNA, Human polyomavirus 12
PKIT10094	PKIT10094M	RNA, Human T-lymphotropic virus Type I
PKIT10095	PKIT10095M	RNA, Human T-lymphotropic virus Type 2
PKIT10096	PKIT10096M	DNA, Klebsiella oxytoca
PKIT10097	PKIT10097M	DNA, Klebsiella pneumoniae
PKIT06015	PKIT06015M	DNA, Lactobacillus plantarum
PKIT07012	PKIT07012M	DNA, All Legionella species
PKIT10107	PKIT10107M	DNA, Lyme disease
PKIT10114	PKIT10114M	DNA, Merkel cell polyomavirus
PKIT10115	PKIT10115M	DNA, Methicillin-resistant Staphylococcus aureus
PKIT10116	PKIT10116M	DNA, MRSA Staphylococcal cassette chromosome
PKIT10117	PKIT10117M	DNA, MRSA (SCC mec) Type Iva
PKIT10118	PKIT10118M	RNA, Mumps virus
PKIT10111	PKIT10111M	DNA, Mycobacterium marinum and ulcerans
PKIT10110	PKIT10110M	DNA, Mycoplasma hominis
PKIT11028	PKIT11028M	DNA, Mycoplasma species
PKIT07014	PKIT07014M	DNA, All Naegleria species
PKIT12070	PKIT12070M	DNA, Orf virus (Contagious pustular dermatitis)
PKIT10125	PKIT10125M	DNA, Pneumocystis jirovecii
PKIT10128	PKIT10128M	DNA, Proteus mirabilis
PKIT07016	PKIT07016M	DNA, Pseudomonas aeruginosa
PKIT11030	PKIT11030M	RNA, Rabies virus
PKIT10136	PKIT10136M	RNA, Rubella virus
PKIT03003	PKIT03003M	RNA, Reston ebola virus
PKIT10139	PKIT10139M	DNA, Serratia marcescens
PKIT10144	PKIT10144M	DNA, Simian virus 40
PKIT10142	PKIT10142M	RNA, Sin Nombre virus
PKIT10143	PKIT10143M	DNA, Saint Louis Polyomavirus
PKIT02001	PKIT02001M	DNA, Staphylococcus aureus
PKIT10137	PKIT10137M	DNA, Staphylococcus epidermidis
PKIT10138	PKIT10138M	DNA, Staphylococcus haemolyticus
PKIT11034	PKIT11034M	DNA, Streptococcus agalactiae
PKIT11036	PKIT11036M	QPCR Kit, DNA, Streptococcus mitis
PKIT11037	PKIT11037M	DNA, Streptococcus oralis
PKIT11038	PKIT11038M	QPCR Kit, DNA, Streptococcus pneumoniae
PKIT11039	PKIT11039M	QPCR Kit, DNA, Streptococcus pyogenes
PKIT11040	PKIT11040M	QPCR Kit, DNA, Streptococcus salivarius
PKIT11041	PKIT11041M	QPCR Kit, DNA, Streptococcus sanguinis
PKIT03005	PKIT03005M	RNA, Sudan Ebola virus
PKIT03006	PKIT03006M	RNA, Taï Forest Ebola virus
PKIT11042	PKIT11042M	DNA, Toxoplasma gondii
PKIT10153	PKIT10153M	DNA, Trichodysplasia spinulosa polyomavirus
PKIT10148	PKIT10148M	DNA, Tsukamurella inchonensis
PKIT03002	PKIT03002M	RNA, Zaire ebola virus

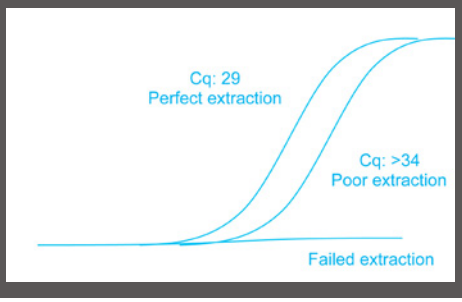
High sensitivity

Primers and probes provide highly specific, easy to interpret test results with sensitivity down to 10 copies.



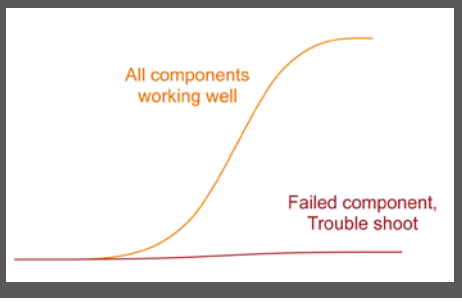
Internal control

Internal extraction control confirms that the DNA extraction process was successful. Exogenous DNA is spiked into the lysis buffer.



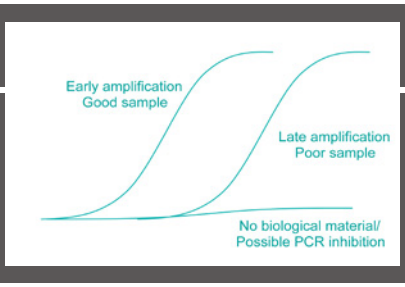
Positive control

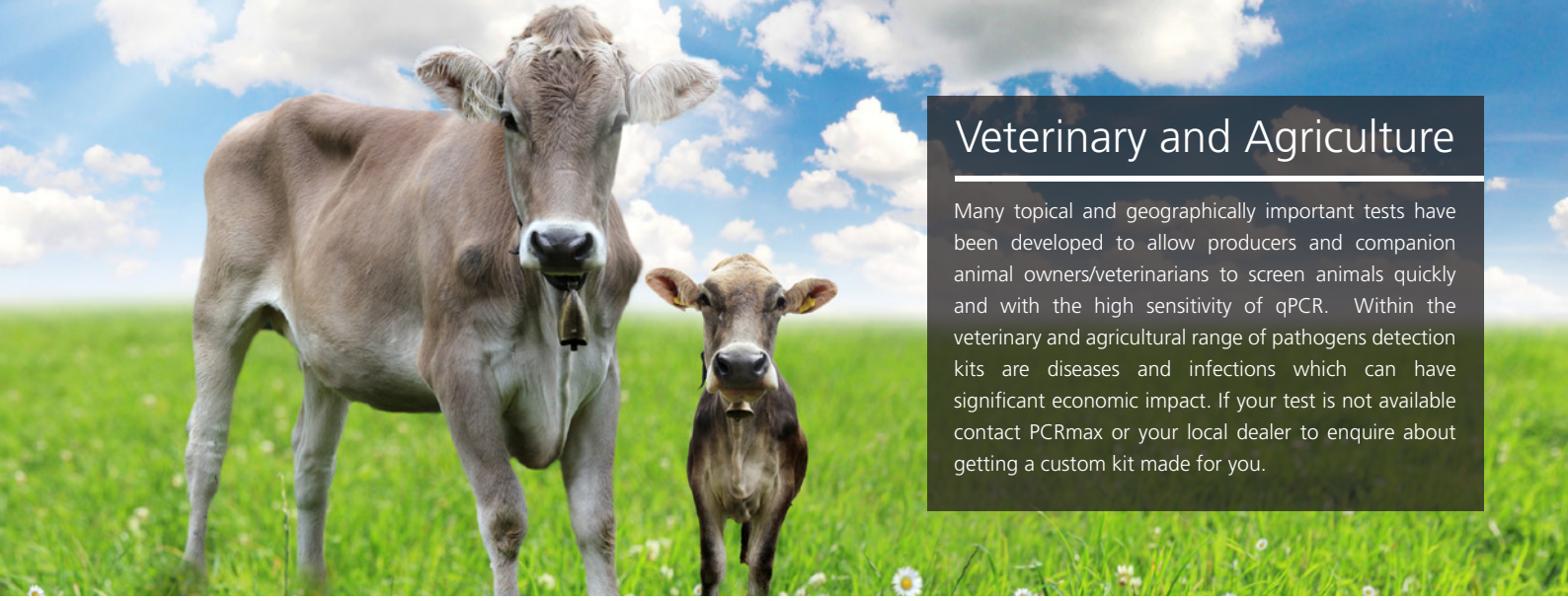
Positive control confirms all conditions and reagents are working well. A high-concentration standard is used as positive control.



Endogenous control

- Endogenous control confirms quality of biological sample.
- Beta-actin confirms that a valid biological template was extracted.
- A primer and probe mix is included to detect Beta-actin through the VIC channel.
- Poor Beta-actin signal may indicate the sample did not contain sufficient biological material.





Veterinary and Agriculture

Many topical and geographically important tests have been developed to allow producers and companion animal owners/veterinarians to screen animals quickly and with the high sensitivity of qPCR. Within the veterinary and agricultural range of pathogens detection kits are diseases and infections which can have significant economic impact. If your test is not available contact PCRmax or your local dealer to enquire about getting a custom kit made for you.

Without Mastermix	With Mastermix	Description
Avian		
PKIT10002	PKIT10002M	DNA, Acinetobacter baumannii
PKIT11004	PKIT11004M	DNA, African Trypanosomiasis
PKIT11005	PKIT11005M	DNA, Aspergillus fumigatus
PKIT12033	PKIT12033M	DNA, Avian adenovirus EDS76 Egg Drop Syndrome
PKIT12055	PKIT12055M	QPCR Kit, RNA, Avian Infectious Bronchitis virus (IBV)
PKIT12049	PKIT12049M	RNA, Avian Influenza A virus Subtype H5
PKIT12050	PKIT12050M	RNA, Avian Influenza A virus Subtype H6
PKIT12051	PKIT12051M	RNA, Avian Influenza A virus Subtype H7
PKIT11026	PKIT11026M	RNA, Avian Influenza A virus Subtype H7N9
PKIT12052	PKIT12052M	RNA, Avian Influenza A virus Subtype H9
PKIT12004	PKIT12004M	RNA, Avian orthoreovirus
PKIT12014	PKIT12014M	DNA, Beak and Feather Disease virus
PKIT11002	PKIT11002M	DNA, Blastocystis genus (All species)
PKIT11001	PKIT11001M	DNA, Burkholderia mallei
PKIT11010	PKIT11010M	DNA, Burkholderia pseudomallei
PKIT08004	PKIT08004M	DNA, Campylobacter Coli
PKIT08005	PKIT08005M	DNA, Campylobacter Jejuni
PKIT12023	PKIT12023M	DNA, Chicken anemia virus
PKIT11017	PKIT11017M	DNA, Chlamydophila psittaci
PKIT12030	PKIT12030M	DNA, Columbid herpes virus 1
PKIT08002	PKIT08002M	DNA, Coxiella burnetii
PKIT11018	PKIT11018M	DNA, Cryptosporidium
PKIT12032	PKIT12032M	DNA, Duck Hepatitis B virus
PKIT11021	PKIT11021M	DNA, Enterocytozoon bieneusi
PKIT08008	PKIT08008M	DNA, Escherichia coli
PKIT08007	PKIT08007M	DNA, Escherichia coli 0157:H7
PKIT12045	PKIT12045M	DNA, Fowlpox virus
PKIT12046	PKIT12046M	DNA, Gallid herpesvirus 1
PKIT12047	PKIT12047M	DNA, Gallid herpesvirus 2
PKIT11025	PKIT11025M	RNA, Bird flu H5N1
PKIT11026	PKIT11026M	RNA, Avian Influenza A virus Subtype H7N9
PKIT12054	PKIT12054M	RNA, Infectious Bursal Disease virus (IBDV)
PKIT08016	PKIT08016M	DNA, Listeria monocytogenes
PKIT12064	PKIT12064M	DNA, Microsporum gypseum
PKIT11044	PKIT11044M	DNA, Mycobacterium avium
PKIT10106	PKIT10106M	DNA, Mycobacterium leprae & Mycobacterium lepromatosis
PKIT12063	PKIT12063M	DNA, Mycoplasma gallisepticum
PKIT12069	PKIT12069M	RNA, Newcastle disease virus
PKIT12071	PKIT12071M	DNA, Ornithobacterium rhinotracheale
PKIT11029	PKIT11029M	DNA, Pasteurella multocida
PKIT03004	PKIT03004M	RNA, Rift Valley Fever virus
PKIT11031	PKIT11031M	RNA, Rotavirus A
PKIT11032	PKIT11032M	RNA, Rotavirus B
PKIT11033	PKIT11033M	RNA, Rotavirus C
PKIT08018	PKIT08018M	DNA, Salmonella enterica
PKIT05001	PKIT05001M	DNA, All pathogenic Salmonella species
PKIT08010	PKIT08010M	DNA, Shiga toxin (stx1) producing Escherichia coli
PKIT08011	PKIT08011M	DNA, Shiga toxin (stx2b) producing Escherichia coli
PKIT08012	PKIT08012M	DNA, Tellurite resistant Escherichia coli
Bovine		
PKIT11004	PKIT11004M	DNA, African Trypanosomiasis
PKIT12001	PKIT12001M	DNA, Anaplasma centrale
PKIT12003	PKIT12003M	DNA, Anaplasma marginale
PKIT11007	PKIT11007M	DNA, Anaplasma phagocytophilum
PKIT12006	PKIT12006M	DNA, Babesia bigemina
PKIT12007	PKIT12007M	DNA, Babesia bovis
PKIT12013	PKIT12013M	DNA, Babesia divergens
PKIT03001	PKIT03001M	DNA, Bacillus anthracis
PKIT11002	PKIT11002M	DNA, Blastocystis genus (All species)
PKIT12017	PKIT12017M	RNA, Bluetongue virus
PKIT12018	PKIT12018M	RNA, Bluetongue virus 1
PKIT12019	PKIT12019M	RNA, Bluetongue virus 8
PKIT12015	PKIT12015M	DNA, Bovine herpesvirus 1
PKIT12016	PKIT12016M	RNA, Bovine Leukemia virus
PKIT12020	PKIT12020M	RNA, Bovine Viral Diarrhoea virus
PKIT08001	PKIT08001M	DNA, Brucella abortus
PKIT11012	PKIT11012M	DNA, Campylobacter fetus
PKIT11013	PKIT11013M	DNA, Campylobacter fetus subspecies venerialis
PKIT08005	PKIT08005M	DNA, Campylobacter Jejuni
PKIT11011	PKIT11011M	DNA, Chlamydophila abortus
PKIT11017	PKIT11017M	DNA, Chlamydophila psittaci
PKIT08002	PKIT08002M	DNA, Coxiella burnetii
PKIT08006	PKIT08006M	RNA, Crimean-Congo Haemorrhagic Fever virus
PKIT11018	PKIT11018M	DNA, Cryptosporidium
PKIT11022	PKIT11022M	DNA, All Encephalitozoon species
PKIT11021	PKIT11021M	DNA, Enterocytozoon bieneusi
PKIT08008	PKIT08008M	DNA, Escherichia coli
PKIT08009	PKIT08009M	DNA, Escherichia coli O104:H4
PKIT12044	PKIT12044M	RNA, Foot and Mouth Disease virus
PKIT08015	PKIT08015M	DNA, Giardia intestinalis
PKIT11027	PKIT11027M	DNA, Leptospirosis
PKIT08017	PKIT08017M	DNA, Mycobacterium avium subspecies paratuberculosis
PKIT12058	PKIT12058M	DNA, Mycoplasma bovis
PKIT12067	PKIT12067M	DNA, Mycoplasma mycoides cluster
PKIT11029	PKIT11029M	DNA, Pasteurella multocida
PKIT11030	PKIT11030M	RNA, Rabies virus
PKIT03004	PKIT03004M	RNA, Rift Valley Fever virus
PKIT11031	PKIT11031M	RNA, Rotavirus A
PKIT11032	PKIT11032M	RNA, Rotavirus B
PKIT11033	PKIT11033M	RNA, Rotavirus C
PKIT08011	PKIT08011M	DNA, Shiga toxin (stx2b) producing Escherichia coli
PKIT11034	PKIT11034M	DNA, Streptococcus agalactiae
PKIT08012	PKIT08012M	DNA, Tellurite resistant Escherichia coli
PKIT12078	PKIT12078M	DNA, Theileria annulata
PKIT12084	PKIT12084M	DNA, Theileria mutans
PKIT12085	PKIT12085M	DNA, Theileria parva
PKIT12083	PKIT12083M	DNA, Trichophyton mentagrophytes
PKIT12082	PKIT12082M	DNA, Tritrichomonas foetus
PKIT12081	PKIT12081M	DNA, Trypanosoma evansi

Without Mastermix	With Mastermix	Description
PKIT11043	PKIT11043M	RNA, Wesselsbron virus
Ovine/caprine		
PKIT11004	PKIT11004M	DNA, African Trypanosomiasis
PKIT12003	PKIT12003M	DNA, Anaplasma marginale
PKIT11007	PKIT11007M	DNA, Anaplasma phagocytophilum
PKIT11002	PKIT11002M	DNA, Blastocystis genus (All species)
PKIT12017	PKIT12017M	RNA, Bluetongue virus
PKIT12018	PKIT12018M	RNA, Bluetongue virus 1
PKIT12019	PKIT12019M	RNA, Bluetongue virus 8
PKIT11012	PKIT11012M	DNA, Campylobacter fetus
PKIT11013	PKIT11013M	DNA, Campylobacter fetus subspecies venerialis
PKIT12022	PKIT12022M	DNA, Capripoxvirus
PKIT11019	PKIT11019M	DNA, Clostridium tetani
PKIT08002	PKIT08002M	DNA, Coxiella burnetii
PKIT08006	PKIT08006M	RNA, Crimean-Congo Haemorrhagic Fever virus
PKIT11018	PKIT11018M	DNA, Cryptosporidium
PKIT11021	PKIT11021M	DNA, Enterocytozoon bieneusi
PKIT08008	PKIT08008M	DNA, Escherichia coli
PKIT08009	PKIT08009M	DNA, Escherichia coli O104:H4
PKIT12044	PKIT12044M	RNA, Foot and Mouth Disease virus
PKIT11027	PKIT11027M	DNA, Leptospirosis
PKIT08016	PKIT08016M	DNA, Listeria monocytogenes
PKIT08017	PKIT08017M	DNA, Mycobacterium avium subspecies paratuberculosis
PKIT12067	PKIT12067M	DNA, Mycoplasma mycoides cluster
PKIT12073	PKIT12073M	RNA, Peste-des-petits-ruminants virus
PKIT03004	PKIT03004M	RNA, Rift Valley Fever virus
PKIT11031	PKIT11031M	RNA, Rotavirus A
PKIT11032	PKIT11032M	RNA, Rotavirus B
PKIT11033	PKIT11033M	RNA, Rotavirus C
PKIT08018	PKIT08018M	DNA, Salmonella enterica
PKIT05001	PKIT05001M	DNA, All pathogenic Salmonella species
PKIT12076	PKIT12076M	DNA, Sheep Poxvirus
PKIT08011	PKIT08011M	DNA, Shiga toxin (stx2b) producing Escherichia coli
PKIT11034	PKIT11034M	DNA, Streptococcus agalactiae
PKIT08012	PKIT08012M	DNA, Tellurite resistant Escherichia coli
PKIT11043	PKIT11043M	RNA, Wesselsbron virus
Equine		
PKIT04001	PKIT04001M	RNA, African Horse Sickness virus
PKIT11004	PKIT11004M	DNA, African Trypanosomiasis
PKIT12009	PKIT12009M	DNA, Babesia caballi
PKIT11002	PKIT11002M	DNA, Blastocystis genus
PKIT11011	PKIT11011M	DNA, Chlamydophila abortus
PKIT11019	PKIT11019M	DNA, Clostridium tetani
PKIT11022	PKIT11022M	DNA, All Encephalitozoon species
PKIT11021	PKIT11021M	DNA, Enterocytozoon bieneusi
PKIT12035	PKIT12035M	DNA, Equid Herpesvirus 1
PKIT12036	PKIT12036M	DNA, Equid Herpesvirus 3
PKIT12037	PKIT12037M	DNA, Equid Herpesvirus 4
PKIT12038	PKIT12038M	RNA, Equine infectious anemia virus
PKIT12044	PKIT12044M	RNA, Foot and Mouth Disease virus
PKIT11027	PKIT11027M	DNA, Leptospirosis
PKIT11030	PKIT11030M	RNA, Rabies virus
PKIT03004	PKIT03004M	RNA, Rift Valley Fever virus
PKIT11031	PKIT11031M	RNA, Rotavirus A
PKIT11032	PKIT11032M	RNA, Rotavirus B
PKIT11034	PKIT11034M	DNA, Streptococcus agalactiae
PKIT12095	PKIT12095M	DNA, Strongylus vulgaris
PKIT12079	PKIT12079M	DNA, Theileria equi
PKIT12080	PKIT12080M	DNA, Trypanosoma equiperdum
PKIT12081	PKIT12081M	DNA, Trypanosoma evansi
PKIT11043	PKIT11043M	RNA, Wesselsbron virus
Feline		
PKIT11004	PKIT11004M	DNA, African Trypanosomiasis
PKIT11003	PKIT11003M	DNA, Ancylostoma duodenale
PKIT11009	PKIT11009M	DNA, Bartonella henselae
PKIT12009	PKIT12009M	DNA, Babesia caballi
PKIT11002	PKIT11002M	DNA, Blastocystis genus
PKIT12008	PKIT12008M	DNA, Bordetella Bronchiseptica & Bordetella Parapertussis
PKIT12025	PKIT12025M	DNA, Chlamydophila felis
PKIT11022	PKIT11022M	DNA, All Encephalitozoon species
PKIT11021	PKIT11021M	DNA, Enterocytozoon bieneusi
PKIT12039	PKIT12039M	RNA, Feline coronavirus
PKIT12040	PKIT12040M	RNA, Feline calicivirus
PKIT12042	PKIT12042M	DNA, Feline Herpesvirus
PKIT12043	PKIT12043M	RNA, Feline Immunodficiency virus
PKIT12041	PKIT12041M	RNA, Feline Leukemia virus
PKIT11023	PKIT11023M	DNA, Geosmithia argillacea
PKIT08015	PKIT08015M	DNA, Giardia intestinalis
PKIT11027	PKIT11027M	DNA, Leptospirosis
PKIT12064	PKIT12064M	DNA, Microsporum gypseum
PKIT12062	PKIT12062M	DNA, Mycoplasma felis
PKIT12065	PKIT12065M	DNA, Mycoplasma haemofelis
PKIT11029	PKIT11029M	DNA, Pasteurella multocida
PKIT11031	PKIT11031M	RNA, Rotavirus A
PKIT11032	PKIT11032M	RNA, Rotavirus B
PKIT11033	PKIT11033M	RNA, Rotavirus C
PKIT11035	PKIT11035M	RNA, SARS coronavirus
PKIT11034	PKIT11034M	DNA, Streptococcus agalactiae
PKIT11042	PKIT11042M	DNA, Toxoplasma gondii
PKIT12083	PKIT12083M	DNA, Trichophyton mentagrophytes
PKIT12082	PKIT12082M	DNA, Tritrichomonas foetus
Canine		
PKIT11004	PKIT11004M	DNA, African Trypanosomiasis
PKIT11003	PKIT11003M	DNA, Ancylostoma duodenale
PKIT11005	PKIT11005M	DNA, Aspergillus fumigatus
PKIT11002	PKIT11002M	DNA, Blastocystis genus
PKIT12008	PKIT12008M	DNA, Bordetella Bronchiseptica & Bordetella Parapertussis
PKIT12021	PKIT12021M	DNA, Canine Babesiosis
PKIT12024	PKIT12024M	RNA, Canine Distemper virus
PKIT12026	PKIT12026M	DNA, Canine herpes virus
PKIT12028	PKIT12028M	RNA, Canine Norovirus
PKIT12090	PKIT12090M	RNA, Canine parainfluenza virus
PKIT11019	PKIT11019M	DNA, Clostridium tetani
PKIT11022	PKIT11022M	DNA, All Encephalitozoon species
PKIT11021	PKIT11021M	DNA, Enterocytozoon bieneusi
PKIT11023	PKIT11023M	DNA, Geosmithia argillacea
PKIT08015	PKIT08015M	DNA, Giardia intestinalis
PKIT10099	PKIT10099M	DNA, Leishmania infantum
PKIT11027	PKIT11027M	DNA, Leptospirosis
PKIT12059	PKIT12059M	DNA, Microsporum canis
PKIT12064	PKIT12064M	DNA, Microsporum gypseum
PKIT12062	PKIT12062M	DNA, Mycoplasma felis
PKIT12065	PKIT12065M	DNA, Mycoplasma haemofelis
PKIT12066	PKIT12066M	DNA, Mycoplasma species haemofelis & haemocanis
PKIT12068	PKIT12068M	DNA, Neospora caninum
PKIT11029	PKIT11029M	DNA, Pasteurella multocida
PKIT11030	PKIT11030M	RNA, Rabies virus
PKIT11031	PKIT11031M	RNA, Rotavirus A
PKIT11032	PKIT11032M	RNA, Rotavirus B
PKIT11033	PKIT11033M	RNA, Rotavirus C
PKIT11035	PKIT11035M	RNA, SARS coronavirus
PKIT11034	PKIT11034M	DNA, Streptococcus agalactiae
PKIT12083	PKIT12083M	DNA, Trichophyton mentagrophytes
Porcine		
PKIT11004	PKIT11004M	DNA, African Trypanosomiasis
PKIT11002	PKIT11002M	DNA, Blastocystis genus
PKIT08005	PKIT08005M	DNA, Campylobacter Jejuni

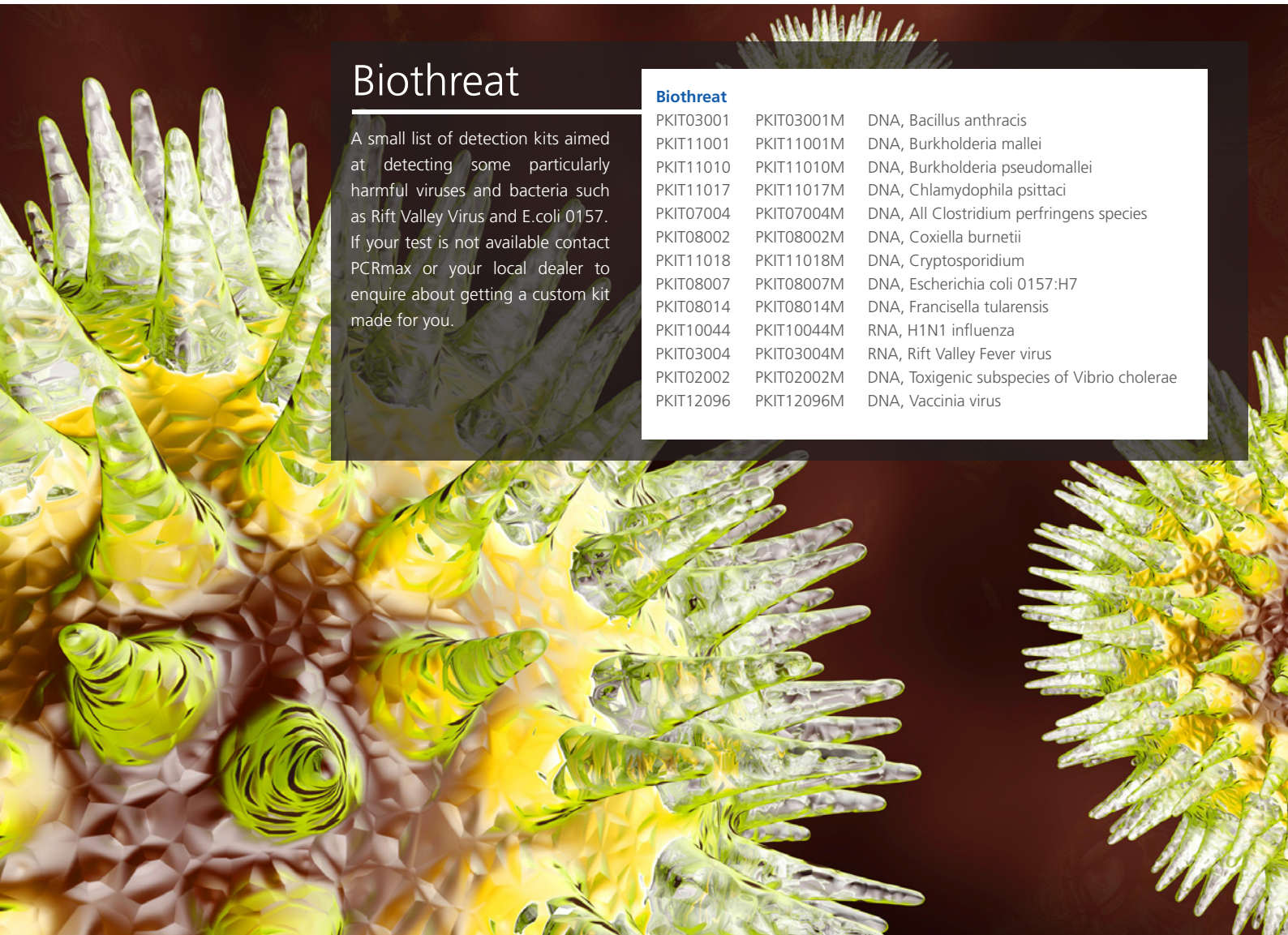
Without Mastermix	With Mastermix	Description
PKIT12092	PKIT12092M	DNA, Mycoplasma hyopneumoniae
PKIT12066	PKIT12066M	DNA, Mycoplasma species haemofelis & haemocanis
PKIT12093	PKIT12093M	DNA, Mycoplasma suis
PKIT12068	PKIT12068M	DNA, Neospora caninum
PKIT12088	PKIT12088M	DNA, Porcine circovirus 1
PKIT12072	PKIT12072M	DNA, Porcine circovirus 2
PKIT12074	PKIT12074M	RNA, Porcine Reproductive and Respiratory Syndrome virus
PKIT11029	PKIT11029M	DNA, Pasteurella multocida
PKIT11030	PKIT11030M	RNA, Rabies virus
PKIT11031	PKIT11031M	RNA, Rotavirus A
PKIT11032	PKIT11032M	RNA, Rotavirus B
PKIT11033	PKIT11033M	RNA, Rotavirus C
PKIT08018	PKIT08018M	DNA, Salmonella enterica
PKIT05001	PKIT05001M	DNA, All pathogenic Salmonella species
PKIT11034	PKIT11034M	DNA, Streptococcus agalactiae
PKIT08010	PKIT08010M	DNA, Shiga toxin (stx1) producing Escherichia coli
PKIT08011	PKIT08011M	DNA, Shiga toxin (stx2b) producing Escherichia coli
PKIT08012	PKIT08012M	DNA, Tellurite resistant Escherichia coli
PKIT11043	PKIT11043M	RNA, Wesselsbron virus

Piscean

PKIT11006	PKIT11006M	DNA, Aeromonas hydrophila
PKIT12031	PKIT12031M	DNA, Cyprinid herpes virus 3
PKIT11021	PKIT11021M	DNA, Enterocytozoon bieneusi
PKIT12048	PKIT12048M	RNA, Grass Carp Reovirus
PKIT12056	PKIT12056M	RNA, Infectious Hematopoietic Necrosis virus
PKIT12057	PKIT12057M	RNA, Infectious Pancreatic Necrosis virus
PKIT10111	PKIT10111M	DNA, Mycobacterium marinum and ulcerans
PKIT09001	PKIT09001M	DNA, Shewanella putrefaciens
PKIT12077	PKIT12077M	RNA, Spring Viremia of Carp virus
PKIT12087	PKIT12087M	RNA, Viral Hemorrhagic Septicemia virus

Others

PKIT12002	PKIT12002M	DNA, Aleutian Disease virus
PKIT12012	PKIT12012M	DNA, Batrachochytrium dendrobatidis
PKIT12010	PKIT12010M	DNA, Botrytis cinerea
PKIT12089	PKIT12089M	DNA, Camelpox virus
PKIT12027	PKIT12027M	DNA, Clavibacter michiganensis subspecies michiganensis
PKIT11015	PKIT11015M	DNA, Cryptococcus neoformans
PKIT08003	PKIT08003M	DNA, Cyclospora cayetanensis
PKIT11020	PKIT11020M	RNA, Dobrava-Belgrade virus
PKIT12034	PKIT12034M	RNA, Epizootic Hemorrhagic Disease virus
PKIT08014	PKIT08014M	DNA, Francisella tularensis
PKIT12053	PKIT12053M	RNA, Israeli Acute Paralysis virus
PKIT12061	PKIT12061M	RNA, Maize Dwarf Mosaic virus
PKIT03005	PKIT03005M	RNA, Sudan Ebola virus
PKIT12075	PKIT12075M	RNA, Sugarcane Mosaic virus
PKIT03006	PKIT03006M	RNA, Taï Forest Ebola virus
PKIT12086	PKIT12086M	RNA, Vesivirus2117
PKIT04002	PKIT04002M	RNA, Slow Bee Paralysis virus
PKIT03002	PKIT03002M	RNA, Zaire ebola virus (with Mastermix)

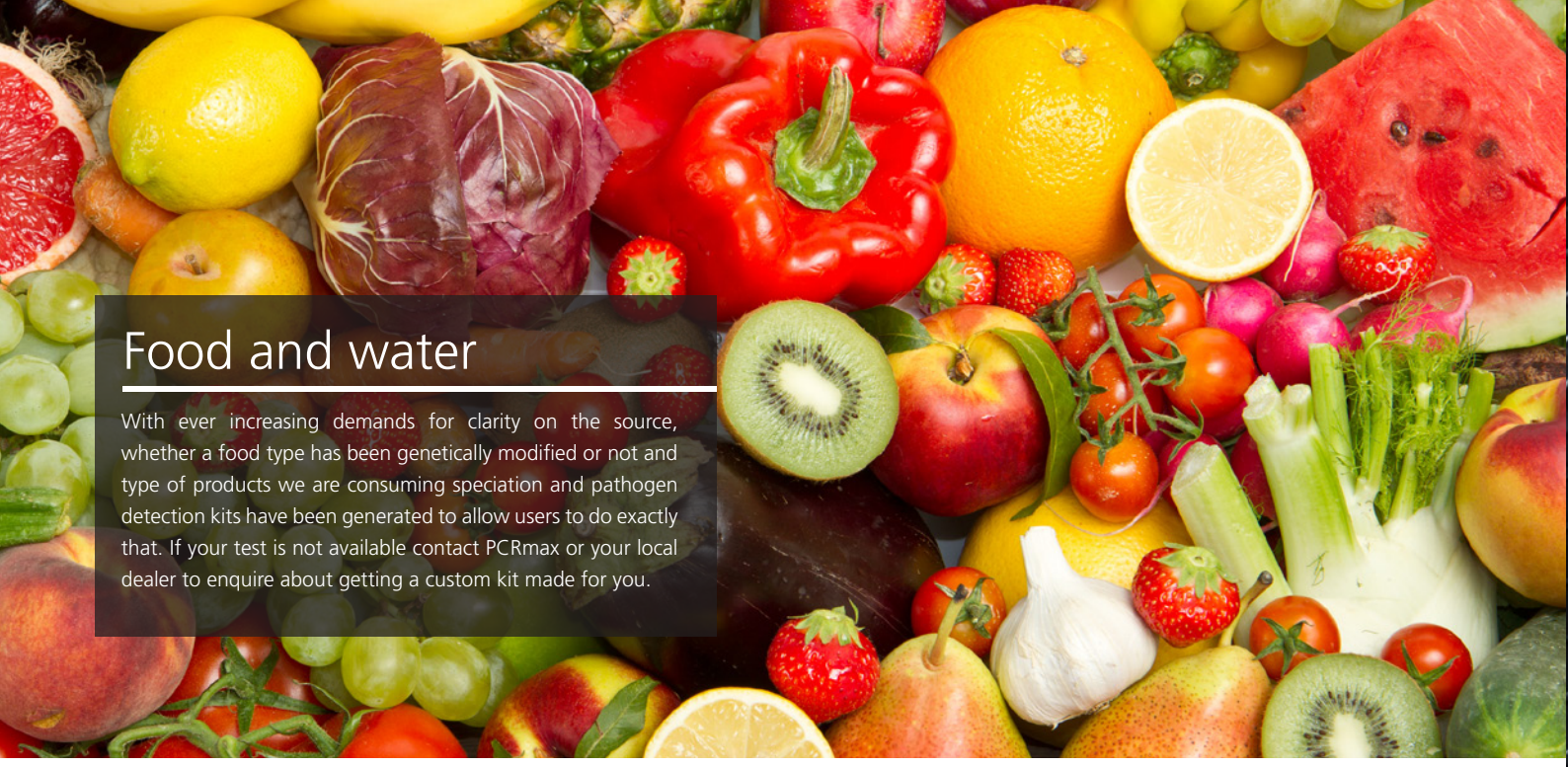


Biothreat

A small list of detection kits aimed at detecting some particularly harmful viruses and bacteria such as Rift Valley Virus and E.coli 0157. If your test is not available contact PCRmax or your local dealer to enquire about getting a custom kit made for you.

Biothreat

PKIT03001	PKIT03001M	DNA, Bacillus anthracis
PKIT11001	PKIT11001M	DNA, Burkholderia mallei
PKIT11010	PKIT11010M	DNA, Burkholderia pseudomallei
PKIT11017	PKIT11017M	DNA, Chlamydophila psittaci
PKIT07004	PKIT07004M	DNA, All Clostridium perfringens species
PKIT08002	PKIT08002M	DNA, Coxiella burnetii
PKIT11018	PKIT11018M	DNA, Cryptosporidium
PKIT08007	PKIT08007M	DNA, Escherichia coli 0157:H7
PKIT08014	PKIT08014M	DNA, Francisella tularensis
PKIT10044	PKIT10044M	RNA, H1N1 influenza
PKIT03004	PKIT03004M	RNA, Rift Valley Fever virus
PKIT02002	PKIT02002M	DNA, Toxigenic subspecies of Vibrio cholerae
PKIT12096	PKIT12096M	DNA, Vaccinia virus



Food and water

With ever increasing demands for clarity on the source, whether a food type has been genetically modified or not and type of products we are consuming speciation and pathogen detection kits have been generated to allow users to do exactly that. If your test is not available contact PCRmax or your local dealer to enquire about getting a custom kit made for you.

Without Mastermix	With Mastermix	Description
Meat Speciation kits		
PKIT06024	PKIT06024M	DNA, Bos taurus (bovine/beef)
PKIT06022	PKIT06022M	DNA, Bubalus bubalis (buffalo)
PKIT06032	PKIT06032M	DNA, Felis catus (cat)
PKIT06033	PKIT06033M	DNA, Gallus gallus (chicken)
PKIT06026	PKIT06026M	DNA, Capreolus capreolus (deer)
PKIT06027	PKIT06027M	DNA, Canis familiaris (dog)
PKIT06030	PKIT06030M	DNA, Equus asinus (donkey)
PKIT06021	PKIT06021M	DNA, Anas platyrhynchos (duck)
PKIT06028	PKIT06028M	DNA, Capra hircus (goat)
PKIT06037	PKIT06037M	DNA, Melanogrammus aeglefinus (haddock)
PKIT06031	PKIT06031M	DNA, Equus caballus (horse)
PKIT06049	PKIT06049M	DNA, Struthio camelus (ostrich)
PKIT06050	PKIT06050M	DNA, Sus scrofa (pig/pork)
PKIT06042	PKIT06042M	DNA, Ovis aries (sheep)
PKIT06038	PKIT06038M	DNA, Meleagris gallopavo (turkey)
PKIT06043	PKIT06043M	DNA, Phacochoerus africanus (warthog)
PKIT06052	PKIT06052M	DNA, Universal meat detection
Fish Speciation kits		
PKIT06045	PKIT06045M	DNA, Pleuronectes platessa (european plaice)
PKIT06037	PKIT06037M	DNA, Melanogrammus aeglefinus (haddock)
PKIT06022	PKIT06022M	DNA, Bubalus bubalis (buffalo)
PKIT06035	PKIT06035M	DNA, Gadus morhua (cod)
PKIT06040	PKIT06040M	DNA, Merlangius merlangus (whiting)
PKIT06048	PKIT06048M	DNA, Pollachius virens (pollock)
PKIT06051	PKIT06051M	DNA, Universal fish detection
Allergens		
PKIT06039	PKIT06039M	DNA, Macadamia integrifolia (Macadamia)
PKIT06020	PKIT06020M	DNA, Anacardium occidentale (cashew)
PKIT06047	PKIT06047M	DNA, Pistacia vera (pistacio)
PKIT06025	PKIT06025M	DNA, Corylus avellana (hazelnut)
PKIT06044	PKIT06044M	DNA, Prunus dulcis (almond)
PKIT06036	PKIT06036M	DNA, Juglans regia (walnut)
PKIT06046	PKIT06046M	DNA, Pisum Satvium (green pea)
PKIT06018	PKIT06018M	DNA, Apium graveolens var. dulce (Celery)
Pathogen contamination		
PKIT07002	PKIT07002M	DNA, Bacillus cereus E33
PKIT07003	PKIT07003M	DNA, Brucella genus (All species)
PKIT08004	PKIT08004M	DNA, Campylobacter Coli
PKIT08005	PKIT08005M	DNA, Campylobacter Jejuni

Without Mastermix	With Mastermix	Description
PKIT06002	PKIT06002M	DNA, Clostridium estertheticum
PKIT07005	PKIT07005M	DNA, Clostridium perfringens Types A&B
PKIT07004	PKIT07004M	DNA, All Clostridium perfringens species
PKIT08002	PKIT08002M	DNA, Coxiella burnetii
PKIT08006	PKIT08006M	RNA, Crimean-Congo Haemorrhagic Fever virus
PKIT08003	PKIT08003M	DNA, Cyclospora cayetanensis
PKIT06003	PKIT06003M	DNA, Dekkera bruxellensis
PKIT07006	PKIT07006M	DNA, Enterococcus faecalis
PKIT07007	PKIT07007M	QPCR Kit, DNA, Enterococcus faecium
PKIT08008	PKIT08008M	DNA, Escherichia coli
PKIT08007	PKIT08007M	DNA, Escherichia coli 0157:H7
PKIT06004	PKIT06004M	DNA, Eubacteria Bacteria Domain
PKIT08014	PKIT08014M	DNA, Francisella tularensis
PKIT08015	PKIT08015M	DNA, Giardia intestinalis
PKIT07008	PKIT07008M	RNA, Hepatitis A virus
PKIT07009	PKIT07009M	RNA, Hepatitis E virus
PKIT07010	PKIT07010M	DNA, JC virus
PKIT10102	PKIT10102M	DNA, Legionella pneumophila
PKIT07012	PKIT07012M	DNA, All Legionella species
PKIT08016	PKIT08016M	DNA, Listeria monocytogenes
PKIT08017	PKIT08017M	DNA, Mycobacterium avium subspecies paratuberculosis
PKIT07014	PKIT07014M	DNA, All Naegleria species
PKIT07015	PKIT07015M	RNA, Norovirus genotypes 1 and 2
PKIT07016	PKIT07016M	DNA, Pseudomonas aeruginosa
PKIT08018	PKIT08018M	DNA, Salmonella enterica
PKIT05001	PKIT05001M	DNA, All pathogenic Salmonella species
PKIT09001	PKIT09001M	DNA, Shewanella putrefaciens
PKIT08010	PKIT08010M	DNA, Shiga toxin (stx1) producing Escherichia coli
PKIT08011	PKIT08011M	DNA, Shiga toxin (stx2b) producing Escherichia coli
PKIT07018	PKIT07018M	DNA, Shigella (All species)
PKIT07017	PKIT07017M	DNA, Simkania negevensis
PKIT02001	PKIT02001M	DNA, Staphylococcus aureus
PKIT08012	PKIT08012M	DNA, Tellurite resistant Escherichia coli
PKIT02002	PKIT02002M	DNA, Toxigenic subspecies of Vibrio cholerae
PKIT07019	PKIT07019M	DNA, All Vibrio cholerae subspecies
PKIT07020	PKIT07020M	DNA, All Vibrio species
PKIT02003	PKIT02003M	DNA, Yersinia enterocolitica
Others		
PKIT07001	PKIT07001M	DNA, Bifidobacterium bifidum
PKIT06001	PKIT06001M	DNA, Bifidobacterium longum
PKIT06015	PKIT06015M	DNA, Lactobacillus plantarum

Also available

PCRmax Eco 48 Real time qPCR system

The PCRmax Eco 48 real time PCR system is a high specification, economically priced real time thermal cycler that accommodates a unique 48-well polypropylene PCR plate utilising the same geometry as standard 384-well plates, but only 1/8 of the size. This enables users to dramatically reduce the qPCR reagent volumes compared to traditional 96-well instruments, saving users precious sample, whilst still producing a strong fluorescence signal. Minimizing the plate size also significantly improves thermal uniformity. A minimum volume of 5µl is validated, resulting in a more efficient use of expensive and 'hard to acquire' template DNA samples.

The Eco 48 Real-time system offers the qPCR capabilities of larger instruments in a compact, accurate footprint. Innovative features include a precise thermal system for unrivalled temperature control, an advanced optical system for highly sensitive fluorescence detection, a 48-well plate for flexible sample throughput, and intuitive, icon-driven software for error-free instrument operation.

Key features

- MIQE compliant.
- HRM functionality is provided as standard and can discriminate class IV SNP 99.9% of the time.
- The Eco 48 can utilise four colours for easy multiplexing.
- Industry leading ±0.1°C temperature uniformity (recorded at 95°C no settle time).
- High uniformity provides high quality data.
- Fast cycling enables several experiments per day, all at an economical price.
- Fastest block-based real-time PCR system with the ability to run 40 cycles in 20 minutes (or less when optimised).
- The PCRmax Eco 48 is an open platform that can utilise any chemistry, dye or PCR reagent.
- Calibrated for SYBR®, FAM™, HEX™, VIC™, ROX™ and Cy®5 fluorescent dyes.
- Easy to use software, streamlined for novices and experts.
- No need to run triplicates, to compensate for poor thermal uniformity of block.

Do more, with less

Results from multiple instruments can be combined together

Eco 48 wells
HIGH uniformity - Run **duplicates**

±0.1°C uniformity means Eco 48 requires fewer replicates than a conventional 96 well system

24 samples
Run time **40 minutes**

The Eco 48 is capable of running 40 cycles in 40 minutes.

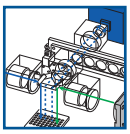
36 samples
per hour

Fewer replicates and faster cycling allows Eco 48 to process more samples than a standard 96 well system.

Conventional 96 wells
LOW uniformity - Run **triplicates**

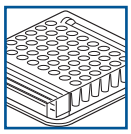
32 samples
Run time **1 hour 20 minutes**

24 samples
per hour



Sensitive optical system delivers precise detection for a range of fluorophores

Convenient 48-well format meets the throughput needs of most researchers



Unique thermal system provides unmatched temperature control for accurate results

PCRmax

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T: +44 (0)1785 812121
F: +44 (0)1785 813748
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www.pcrmax.com

Technical note

For research purposes only

Quick facts: Eco 48 Real-Time PCR System
Speed. Confidence. Sensitivity. Performance. Value

Eco 48 Real-Time PCR System Highlights

- Superior qPCR Performance
  Sensitivity down to 1 copy; dynamic range > 9 logs; discriminate between 5,000 and 10,000 copies with 99%+ confidence
- Easy-to-Use Instrument
  Simple workflow and intuitive software
- Most Affordable System Available
  Priced for the individual researcher

Real-Time PCR for Everyone

The Eco 48 Real-Time PCR system puts powerful qPCR applications within reach of individual researchers. Large, expensive thermal cy- clers that take up an entire workspace are replaced with an affordable, compact system that fits easily on any lab bench (Figure 1). Delivering unsurpassed data quality in less than 40 minutes for 40-cycle runs, with run times down to 15 minutes when optimized, all using standard plastics and chemistires.

The PCRmax Eco 48 system revolutionizes qPCR accessibility for both new and experienced Real-Time PCR users. The flexible Eco 48 platform supports all chemistries and Real-Time PCR applications, including absolute quantification by standard curve, relative quantification using the ΔΔCq method with support for multiple reference gene normalization, allelic discrimination by end-point fluorescence, and genotyping by High Resolution Melt (HRM) curve analysis. Whatever your qPCR needs are, the Eco 48 system meets them.

Breakthrough Instrument Design

Developed through a collaboration between the labs of Nobel Laure- ate David Baltimore, Ph.D., and Axel Scherer, Ph.D., at the California Institute of Technology, the Eco 48 system supports a range of demanding Real-Time PCR applications. The innovative instrument design (Figure 2) includes an advanced thermal system for the world's most precise temperature control for any block based qPCR platform and a sensitive optical system that supports a wide variety of chemistries and fluorophores, providing researchers with a breakthrough user experience and unmatched cost-effectiveness.

Simple Installation

The benchtop Eco 48 system is ready to use upon receipt. With a plug- and-play design, instrument installation by experienced or novice scientists is quick and easy. No calibration is required.

Optimized Sample Number

To provide a small, benchtop-friendly, 13.6" × 12.2" footprint, the Eco 48 system employs an optimized 48-well plate format . For applications that require analysis of higher sample numbers, such as Standard Curve and Relative Quanitification studies, PCRmax offers the free EcoStudy software. EcoStudy enables data from multiple plates to be combined and ana lyzed as a single study, giving the user an effectively unlimited sample throughput.

Unrivaled Temperature Control

qPCR specificity and efficiency depend upon precise temperature control during the annealing and extension steps. For the highest accuracy, the temperature must remain uniform across the entire heat block, ensuring that all samples proceed equally through the PCR reaction. Most thermocyclers demonstrate a ± 0.5°C variation in temperature across their heat blocks, potentially leading to inaccurate results. In addition, they can take up to 15 seconds to reach tempera- ture equilibrium at any given step across all wells, increasing the time to complete a qPCR run. The PCRmax Eco 48 Real-Time PCR system (Figure 2) overcomes these shortcomings with a proprietary thermal system that provides accurate temperature control and quickly cycles from one temperature to the next.

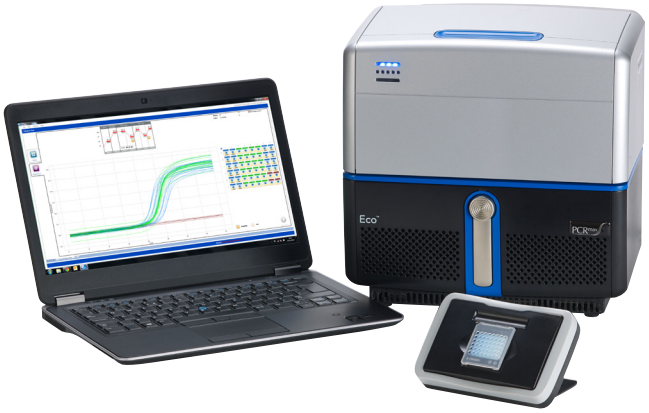
To achieve this level of true temperature control, the Eco 48 thermal system incorporates a precisely electroformed hollow silver block that is heated and cooled by a single Peltier device. The hermetically sealed hollow block contains a conductive fluid and two opposing agitators driven by electromagnetic motors. During PCR cycling, these agitators rapidly circulate the fluid throughout the hollow block, transferring heat from the single balanced Peltier device quickly and evenly across the block. This unique design virtually eliminates thermal non-uniformity and prevents "edge effects", providing a new level of thermal performance below ± 0.1°C well-to-well uniformity across the 48-well plate (Table 1).

The result: higher qPCR performance (tighter Cq, greater PCR efficiency, higher R2) and the ability to perform demanding applications such as HRM. In addition, this unique thermal block design facilitates an average thermal ramp rate to 5.5°C / sec., reducing overall PCR run times. Typical run time for a 40-cycle PCR protocol is < 40 minutes, with optimized runs down to 15 minutes for 40 cycles.

Precise, Sensitive Optical System

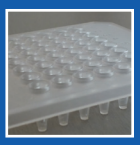
The Eco 48 Real-Time PCR system contains an advanced high-performance optical system that delivers precise and sensitive fluorescence detection, facilitating all four-color multiplex applications.

Figure 1: Eco 48 Real-Time PCR System

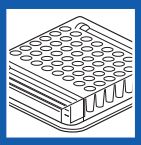


Key components of the high-performance Eco 48 Real-Time PCR system include the Eco 48 instrument, fully MIQE compliant free, open licence analysis and running software and the illuminated Eco 48 sample loading dock.

Figure 2: Eco 48 Innovative Design Features

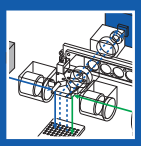


Convenient 48-well format meets the throughput needs of most researchers



Unique thermal system provides unmatched temperature control for the most accurate results

Intuitive icons lead through setup, run and analysis quickly and easily



Sensitive optical system delivers precise detection for a range of fluorophores

The Eco 48 Real-Time PCR system offers the qPCR capabilities of larger instruments in a compact footprint. Innovative features include a precise thermal system for unrivaled temperature control, an advanced optical system for highly sensitive fluoresence detection, a 48-well plate for flexible sample throughput, and intuitive, icon-driven software for error-free instrument operation.

The system is provided factory-calibrated for use with SYBR, FAM, HEX, VIC, ROX, and Cy5, but can be used with any Real-Time PCR fluorophores overlapping spectra with the calibrated dyes (Table 2). For excitation, two panels—48 fixed LEDs each provide excitation energy of a distinct spectra, enabling excitation over a broad range of fluorophores. Each of the 48 LEDs illuminates a specific well location within the plate, eliminating the optical distortion created by most stationary optical systems.

The optical system enables real-time detection of up to four targets in a single reaction. Four emission filters in a linear filter slide and a high-performance CCD camera detect the fluorescence from each well at each cycle (Figure 2). This approach prevents data loss and allows changes to plate setup and data analysis even after the run is completed. Standard melt curve and HRM analysis protocols are supported by continuous data acquisition in a single dye channel during the melt for increased data collection and reduced run times.

These features combined with a patented Adaptive LED Control algorithm ensures you never saturate the detector, massively enhance the dynamic range and never get artifacts in you data caused by stray light polluting your sample

User-Friendly Software

A netbook computer pre-installed with flexible, easy-to-use software that integrates user control, real-time data collection, and advanced data analysis is provided with the Eco 48 system. The software conforms to MIQE (Minimum Information for Publication of Quantitative Real-Time PCR Experiments) guidelines*, making data analysis and submission for publication review more efficient.

* Bustin SA, Benes V, Garsong JA, Hellemans J, Hugget J, et al. (2009) The MIQE Guidelines: Minimum Information for Publication of Quantitative Real-Time PCR Experiments. Clinical Chemistry 55:4.

Easy-to-Use Interface

Eco 48 software uses a unique icon-driven user interface to simplify experimental design and setup (Figure 3). Pre-set thermal profile defaults are provided for the most commonly used experimental protocols. Temperature and time for each protocol step can easily be changed by click-and-drag action with the mouse. Experiment templates can be customized and saved for future use.

Table 1: Eco 48 System Maintains Thermal Uniformity Over the Entire Plate for Better Cq Reproducibility

Average Cq	Standard Deviation of Cq	Maximum Cq	Minimum Cq
24.131	0.063	24.339	24.017

When running 48 replicates of a given assay, the Eco 48 thermal system virtually eliminates the "edge effect" observed on other block-based qPCR instruments, leading to strong reproducibility of the replicates as shown by the extremely small standard deviation of the Cq.

Table 2: Eco 48 System Excitation and Emission

Channel	Excitation (nm)	Emission (nm)	Example Fluorophores Detected
1	452–486	505–545	SYBR, FAM
2	542 – 582	604–644	ROX
3	452 – 486	562–596	HEX, VIC
4	542–582	665–705	Cy5, Q670

Two excitation LED arrays combined with four emission filters produce raw fluorescence data that are automatically analyzed using spectral deconvolution software to effectively minimize cross-talk between dyes. Additional dyes in the wavelength range of the optical system emission filters are supported with no additional calibration required.

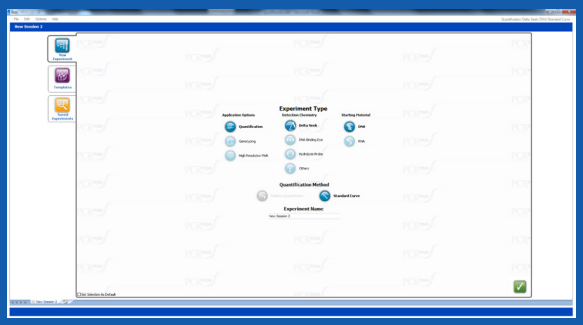
Data Analysis

With the Eco 48 system and software, data collection is monitored in real time, allowing researchers to access run viability immediately. The user-friendly data analysis interface allows researchers to easily view the component data, amplification plot, melt curve analysis, and the analyzed results, including Cq values, standard curve equations, RQ values, and genotyping calls. Data can be exported into Excel or CSV/TSV and custom reports generated directly into PowerPoint formats. High-resolution images can be directly exported in multiple image formats, ready to use in any presentation.

Increased Throughput with Eco Study

EcoStudy software allows mulitple PCR runs to be combined and analyzed as a single study, effectively increasing the Eco 48 system's sample throughput. One standard curve is applied across all the plates so that only one, the "mother plate", needs to dedicate multiple wells to reference standards. All additional plates or "daughter plates", are compared against the standard curve generated on the mother plate. This eliminates the need for each plate to carry its own standards, making wells available for samples and increasing throughput.

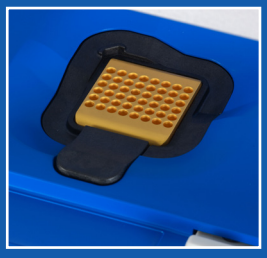
Figure 3: Icon-Based Interface Easily Directs Users From Setup to Analysis



Intuitive icons on each screen enable researchers to easily walk through setup, run, and analysis for their Real-Time PCR experiment

Figure 4: Simplified Eco 48 System Workflow

Load samples in plate using the convenient Eco 48 sample loading dock.



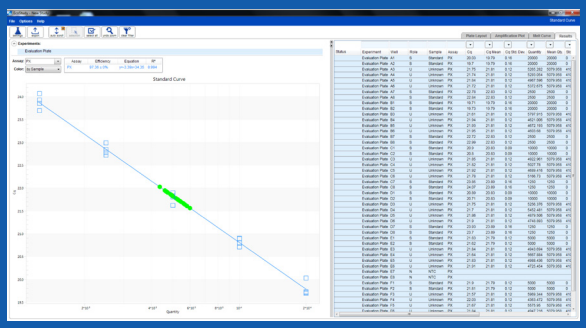
Place sample plate in instrument

Run—intuitive software takes care of the rest, including data analysis.

Simplified Workflow

The Eco 48 workflow is based on three simple steps: load samples into the 48-well plate, place the plate into the Eco 48 instrument, and run (Figure 4). The Eco 48 software provides instrument control, data col- lection, and data analysis. The most common qPCR parameters are automatically in place. These can be easily changed on the computer to meet specific experimental requirements.

Figure 5: Highly Accurate qPCR Results



Results obtained from a standard qPCR run using the Eco 48 Demonstration plate. The experiment was performed in a 20-µl final reaction volume with SYBR Green Master Mix. PCR efficiency is >97% with R2 = 0.994. The 24 unknown samples were quantified with a Standard Deviation of Cq = 0.1 These measurements indicate great data quality.

High-Performance Results

Due to unmatched temperature control and an optical system de-signed for individual well monitoring, the Eco 48 system produces highly accurate, reliable results with PCR efficiencies between 90% and 110% and R2 > 0.99 when using standard optimized assays (Figure 5).

Accessible qPCR

With the Eco 48 Real-Time PCR system, highly accurate qPCR results can be easily obtained on any budget. Combining precise temperature control, four-color multiplex capabilities, an optimized optical system, and intuitive software in a small-footprint device, the affordable Eco 48 system is available to all researchers. Now everyone can own their own qPCR instrument; ready for use when they are, leading to more productive and successful research.

Learn more

For more information about the Eco 48 Real-Time PCR system, visit www.PCRmax.com

Delta Seek Reagents

With the launch of the new website we have been able the over 500 different handbooks associated with the kits and pool them in one location; this will make it very much easier to guide a customer to a specific kit and also to find if a kit of interest actually exists.
We have been getting several enquiries related to the Food and Water Testing kits, these seem topical at the moment, as does the Noro Virus kit.

Key Demo Kit Info:

In order to make sampling of the Delta Seek kits significantly easier and more meaningful to the end user we are going to implement a discount structure that will allow end users to get a full size kit (any kit of the >500 in the range) at a discounted demo price, more details to follow.

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