Insta-Q Series

Real-Time PCR System

HiGenoMB Unzipping Genes

ANVISA & CE - IVD Approved

HIMEDIA For Life is Precious

Introduction

With a vision to redefine PCR based solutions, HiMedia Laboratories Pvt. Ltd. launched the Insta-Q Series Real-Time PCR Platform with its unique range of features making it an exclusive Real-Time PCR System in the market. Our **User-Friendly State of the Art** machines can measure amplification as it occurs, cycle by cycle, thus resulting in precise & accurate quantification.

The **Insta-Q Series of Real-Time PCR Systems** are a fully integrated quantitative PCR amplification, detection and data analysis platform. The latest design combines a thermal cycler, an advanced optical system with individual LED excitation source and an intuitive data analysis software. The **Gradient Feature** aids in easy assay optimization.

These robust machines are genuinely **Open Systems** – which enable the user to decide the choice of reagents and kits to be run. The machines come with **Factory Calibrated Filters**. Re-calibration is required only in case of major machine upgradations. A unique feature of the Insta-Q Series is the qPCR optics available in a more flexible format. To get accurate results, the **Robotic Arm Scans Individual Well** which **Eliminates** the use of Passive Reference Dye - **ROX dye**.

The software is equipped to export the raw data in multiple formats such as **Excel, Images, Text, Pdf** thus allowing results to be viewed in common programs.

The sensitivity and specificity of the Insta-Q Series of instruments is impressive and will help the user to generate **Faster, Hassle-free and Reliable results** to achieve desired research goals.

Features

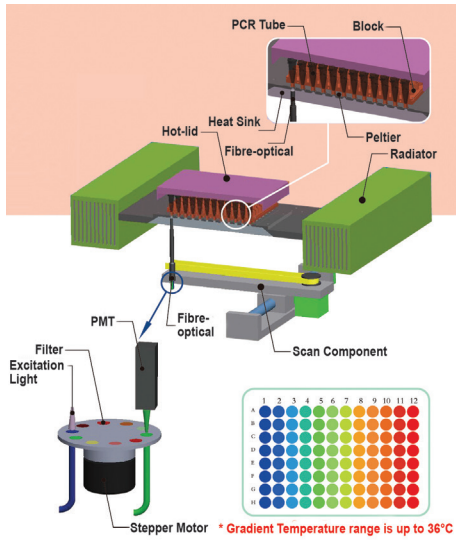
- Truly Open System [Compatible with Kits and Reagents of other companies].
- ROX independent Real-Time PCR system. Normalization with ROX dye not required.
- Customizable dye library to create new excitation/detection wavelength combinations in given range and hence future proof.
- User Friendly Software facilitates simple assay set up and data interpretation.
- Auto Gain intensity function for fluorescence adjustments.
- 12 different gradient temperatures (1°C to 36°C gradient range).
- Wireless connectivity.
- Factory calibrated filters, no need of calibration after new dye added or in future.

Dye Library	
Channel Wavelength	**Dyes**
470nm – 525nm	FAM, SYBR, EvaGreen®
523nm – 564nm	HEX, JOE, TET, VIC, Cal Fluor® Gold 540 / Yakima Yellow
571nm – 612nm	ROX, TexRed, Cal Fluor® Red 610 / JUN
628nm – 692nm	CY5, Mustang Purple / Quasar 670 / Pulsar 650
678nm – 718nm	Cy5.5, Quasar 705
550nm – 585nm	TAMRA, NED, Cy3, ABY

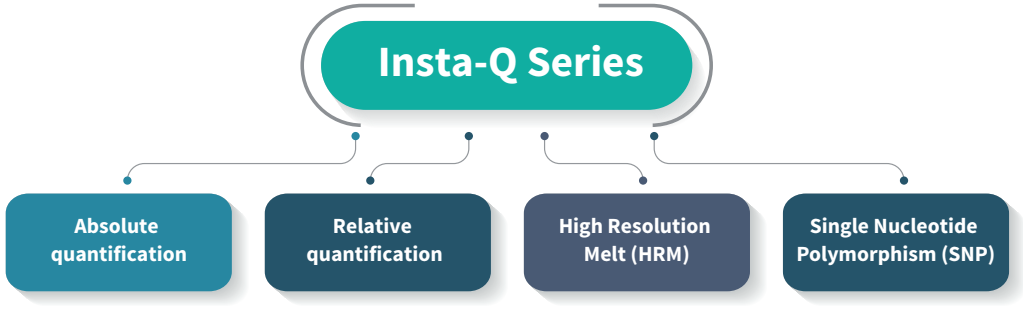
1. **Innovative 3D Hotlid Design and Technology**
2. **96 Wells High Throughput**
3. **Gradient facility**
4. **Well to well individual scanning**
5. **Optical fibre based Photo Multiplier Tube Technology for detection**

Working Principle of the Machine

- Ferrotec Peltier technology used for thermal cycling during PCR assay.
- LED based excitation source with advanced fibre optic transmission technology for Sensitive and Reliable photoelectric detection system.
- Photo Multiplier Tube (PMT) detects fluorescent emission.
- Stepper motor with robotic arm containing optical fibre used for individual well scanning.
- Scanning time period: 5.5 seconds for 96 wells.



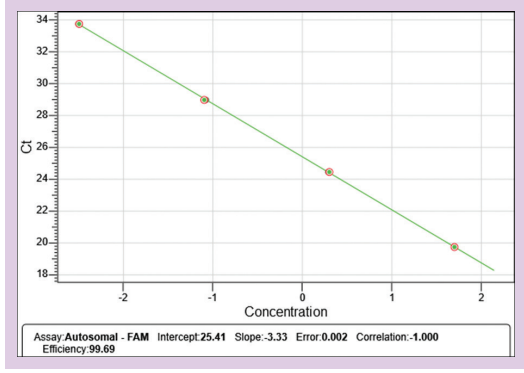
Analysis procedures supported by Insta-Q Series software



Absolute Quantification

- Absolute quantification is achieved by comparing the Ct values of the test samples to a standard curve.
- The result of the analysis is quantity of nucleic acid (copy number, unit mass) per given amount of sample (per cell, per ng of total RNA).
- Absolute quantitation uses serially diluted standards of known concentrations to generate a standard curve.
- Standard curve produces a linear relationship between Ct and initial amounts of total DNA or cDNA from RNA of the Gene of interest (GOI), allowing the determination of the concentration of unknowns based on their Ct values.
- The linearity is denoted by the R squared (r^2) value (r is Pearson Correlation Coefficient) and should be very close to 1 (> 0.985).
- The efficiency of both the standard curve and sample reactions should be between 90 and 110%.
- The instrument can also be used to quantify ready to load NGS libraries using standard SYBR based assays allowing for accurate library quantification and precise loading into Illumina sequencing machines.

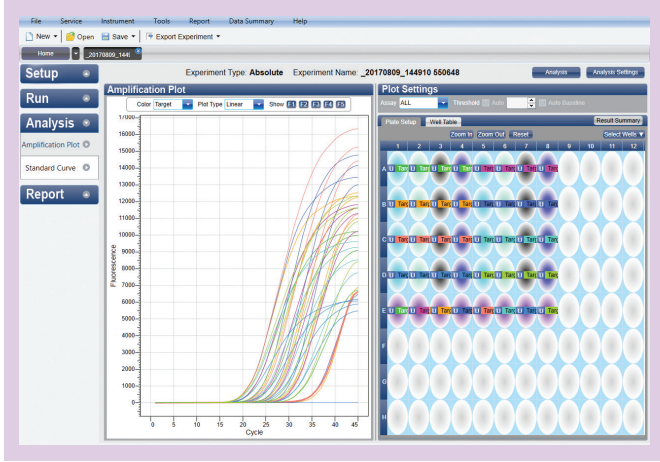
Standard Quantification Assay



Plotting a Standard Curve

- In absolute quantification, the quantity (e.g., copy number or unit mass) of the unknown sample is interpolated from a range of standards of known quantity.
- To construct a standard curve, a template with known concentration is required.
- Dilution of this template is then performed and these dilutions serve as the standards. The unknown test samples are assayed with the standards in the same experimental run.
- The standard curve constructed from the diluted standard template can then be used to determine the target quantity in the unknown sample by interpolation, similarly to using molecular size standards to determine the molecular size of an unknown DNA band on an agarose gel.
- Standard curve can be imported from previous run experiments. It can be imported only in standard curve assays. Hence standards need not be run every time.

Software Analysis Interface



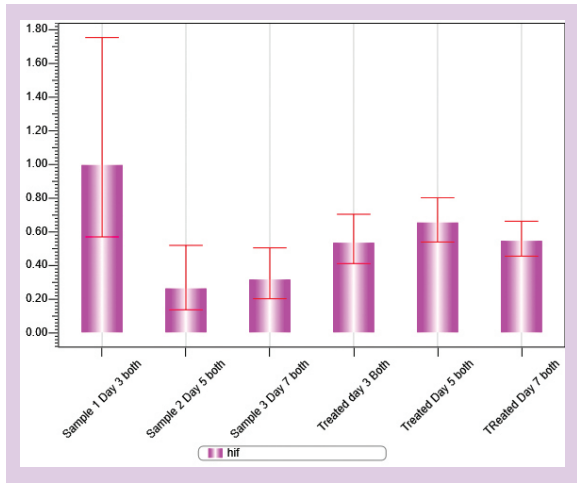
Relative Quantification

- Let's get the nomenclature settled.
  - The gene of interest whose expression is getting determined is the target gene.
  - The housekeeping gene whose expression is unregulated is called the reference gene.
  - The sample (or group of samples) being used as a control is the calibrator sample.
  - Finally, the sample (or group) that is being treated or tested for differences is the test sample.
  - The ratio of the target gene expression in the test sample over the calibrator sample is interchangeably called the expression fold change or relative gene expression.
- Amplification efficiency of the reaction is an important consideration when performing relative quantitation.
- Past methods of calculating gene expression have assumed the amplification efficiency of the reaction is ideal, or 1.
- Actual amplification efficiency values for a particular reaction can be established via a standard curve measurement during assay design, and multiple standard curves should be run to verify that this efficiency measurement is reproducible.
- Although absolute quantification can be useful in determining absolute quantities of target, the majority of scientific questions regarding gene expression can be accurately and reproducibly answered by measuring the relative concentration of the GOI in unknown samples.
- Differences in Ct value between an unknown sample and reference sample are expressed as fold- changes (i.e., up- or down- regulated) relative to the reference sample and thereby the results are expressed as a target/reference ratio.

Features

- Automated calculation of ΔCt and ΔΔCt values by software.
- Exact and final RQ values provided by software at the end of the assay.
- Easy and hassle free transfer of data to Excel or Word format on a Single Click.
- Option to import Standard curves run from other experiments in RQ assays as well.
- Normalization to multiple endogenous controls.

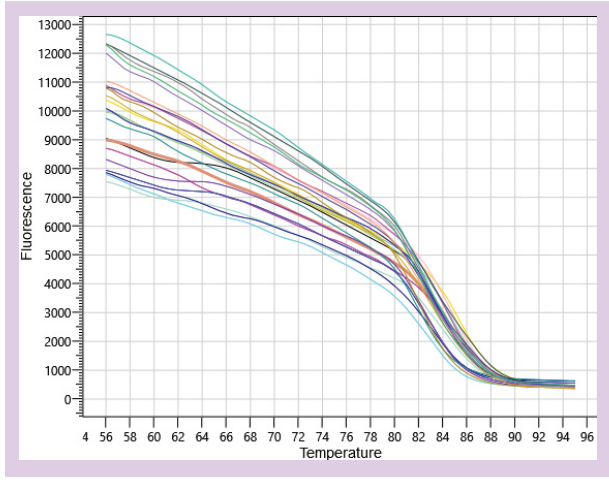
Relative Quantification



High-Resolution Melt Analysis

- The principle of HRM is the same as a Low-Resolution Melt curve, except that the temperature difference between each fluorescence reading is reduced.
- During a Low-Resolution Melt curve analysis, the temperature increases are typically in 0.5 °C steps, but for HRM this is reduced to 0.008 - 0.2 °C increments.
- This allows a much more detailed analysis of the melting behaviour.
- HRM sensitivity and reliability has been improved with the use of a variety of new dsDNA intercalating dyes viz., - LCGreen (R), SYTO9, EvaGreen (R), Chromofy and BEBO.

HRM data



Features

- HRM assays can be run using the same software. Saves the trouble of learning and procurring a new software.
- No external calibration required for running HRM assays.

- Cost effective compared to other genotyping technologies such as sequencing and TaqMan SNP typing.
- Fast and able to accurately genotype huge numbers of samples in rapid time.
- Fast and high-throughput analysis of post-PCR of genetic mutations or variance in nucleic acid sequences.
- With a good quality, HRM assay powerful genotyping can be performed by non-geneticists in any laboratory with access to an HRM capable Real-Time PCR machine.

HRM has renewed interest in the utility of DNA melting for a wide range of uses, including:

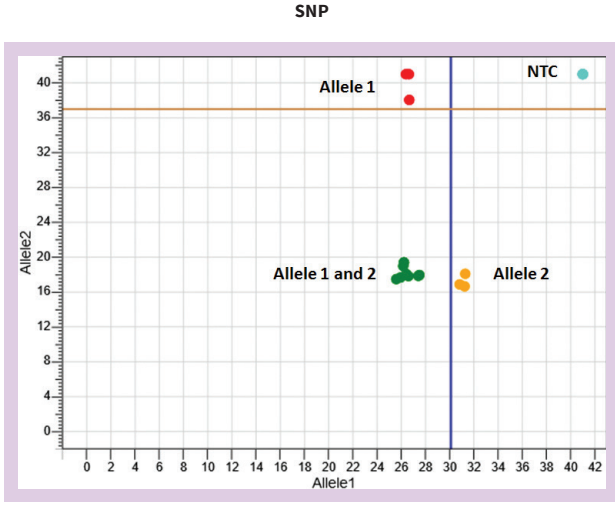
- Mutation discovery (gene scanning)
- Species identification
- Screening for loss of heterozygosity
- Somatic acquired mutation ratios
- DNA fingerprinting
- HLA compatibility typing
- SNP genotyping
- Association (case/control) studies
- Characterization of haplotype blocks
- Allelic prevalence in a population
- DNA methylation analysis
- Identification of candidate predisposition genes
- DNA mapping

Single Nucleotide Polymorphism (SNP)

- A Single Nucleotide Polymorphism or SNP is a DNA sequence variation occurring when a single nucleotide in the genome differs between members of a species or two allele of a gene.
- Probe based SNP Genotyping Assays provide a highly flexible technology for detection of polymorphisms within any genome.
- Probe Assays have a simple workflow and provide a quick way to generate genotyping data.

Features

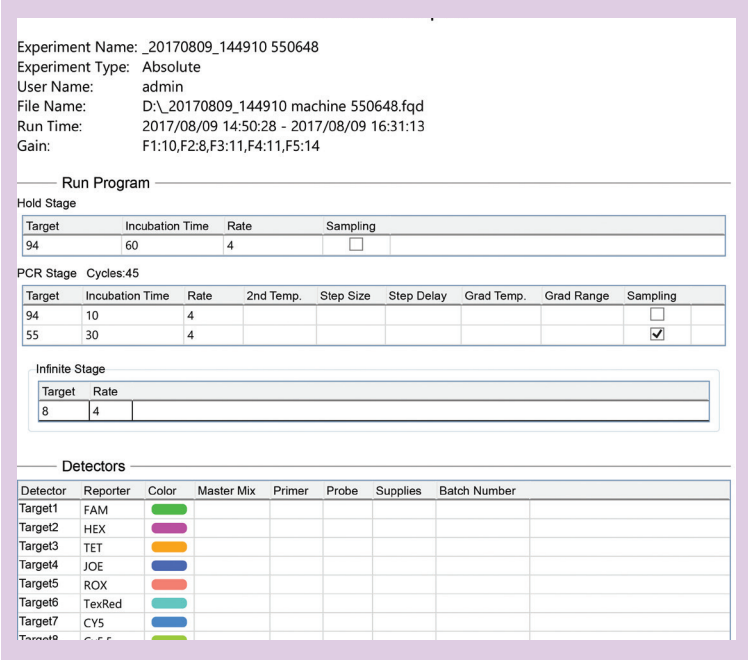
- Auto Call and Manual call options
- Easy and colour coded Scatter plot based on SNP assay analysis



Report Generation

- Generate automatic assay reports at the end of PCR run.
- Customize assay reports as per requirement using built in report editor
- All in one consolidated report for
  - Accurate & concised experimental details
  - Basic experiment information
  - Experiment process
  - Plate diagram
  - Amplification curve
  - Result table with Ct values

Consolidated Report / QC Report



Experiment Name: _20170809_144910 550648
Experiment Type: Absolute
User Name: admin
File Name: D:_20170809_144910 machine 550648.fqd
Run Time: 2017/08/09 14:50:28 - 2017/08/09 16:31:13
Gain: F1:10,F2:8,F3:11,F4:11,F5:14

Run Program

Hold Stage

Target	Incubation Time	Rate	Sampling
94	60	4	☐

PCR Stage Cycles:45

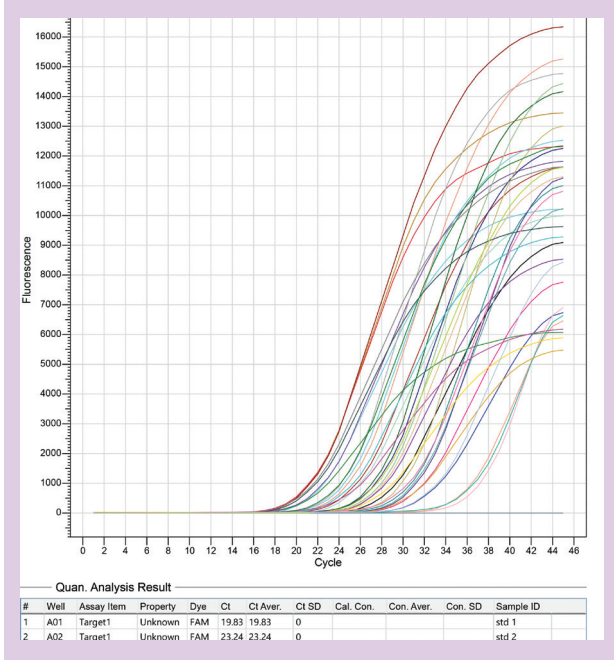
Target	Incubation Time	Rate	2nd Temp.	Step Size	Step Delay	Grad Temp.	Grad Range	Sampling
94	10	4						☐
55	30	4						☑

Infinite Stage

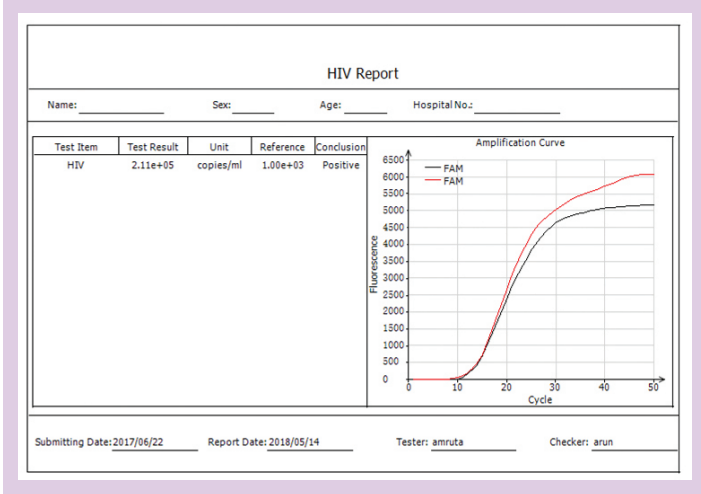
Target	Rate
8	4

Detectors

Detector	Reporter	Color	Master Mix	Primer	Probe	Supplies	Batch Number
Target1	FAM						
Target2	HEX						
Target3	TET						
Target4	JOE						
Target5	ROX						
Target6	TexRed						
Target7	CY5						



Report Template



HIV Report

Name: Sex: Age: Hospital No.:

Test Item	Test Result	Unit	Reference	Conclusion
HIV	2.11e+05	copies/ml	1.00e+03	Positive

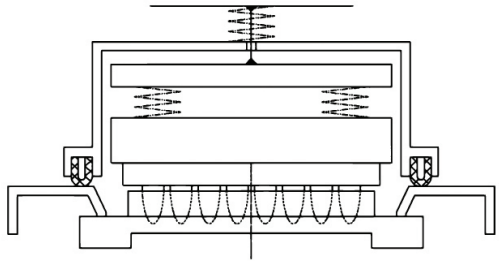
Amplification Curve
FAM
FAM
Fluorescence
Cycle

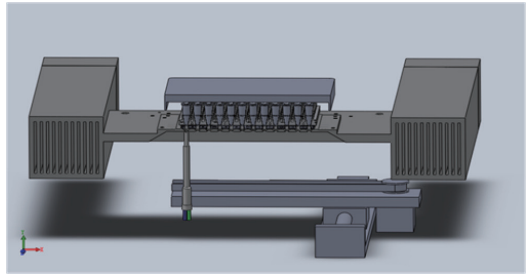
Submitting Date: 2017/06/22 Report Date: 2018/05/14 Tester: amruta Checker: arun

Product Hardware

Hot Lid Technology

- Innovative 3D Hot Lid. It consists of a Pressure Box which exerts uniform pressure on the plate module through 6 compression springs.
- Obtain perfect sealing and avoid sample evaporation or overloading due to lid imbalance.
- The aluminium plate fits snugly on the PCR plate with a certain amount of pressure. This airtight seal prevents the cold air and hot air connection on the module. Thus, the module bears dynamic temperature uniformity.



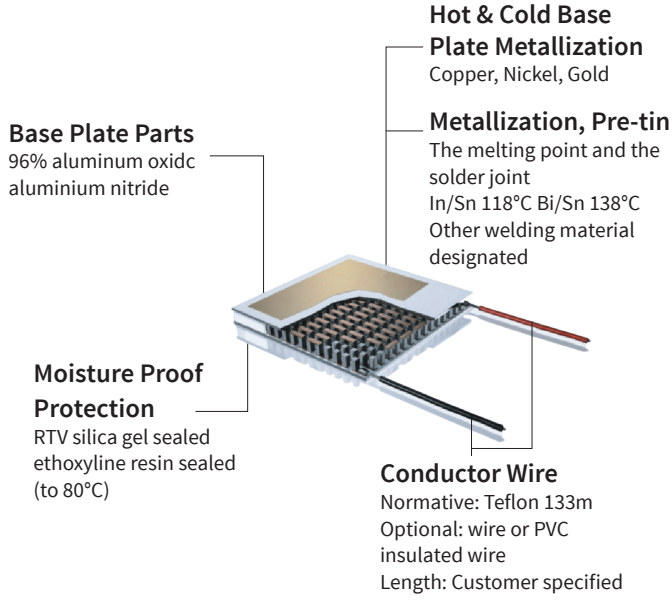


Unique PMT scanning system

Bottom scanning technology for well-to-well individual scanning.

- Precise optical path system combined with sensitive PMT system detects fluorescence activity accurate, sensitive & reliable.
- The probe has a long-life LED light source which requires no maintenance.

- The new model of Thermo Electric (TE) base plate (72 series) has a longer life span.
- The new adhesive technology used with the advanced semi-conductor substrate:
  i. Improves the performance of the TE base plate under highly humid conditions.
  ii. Greatly improves the life span of the TE base plate

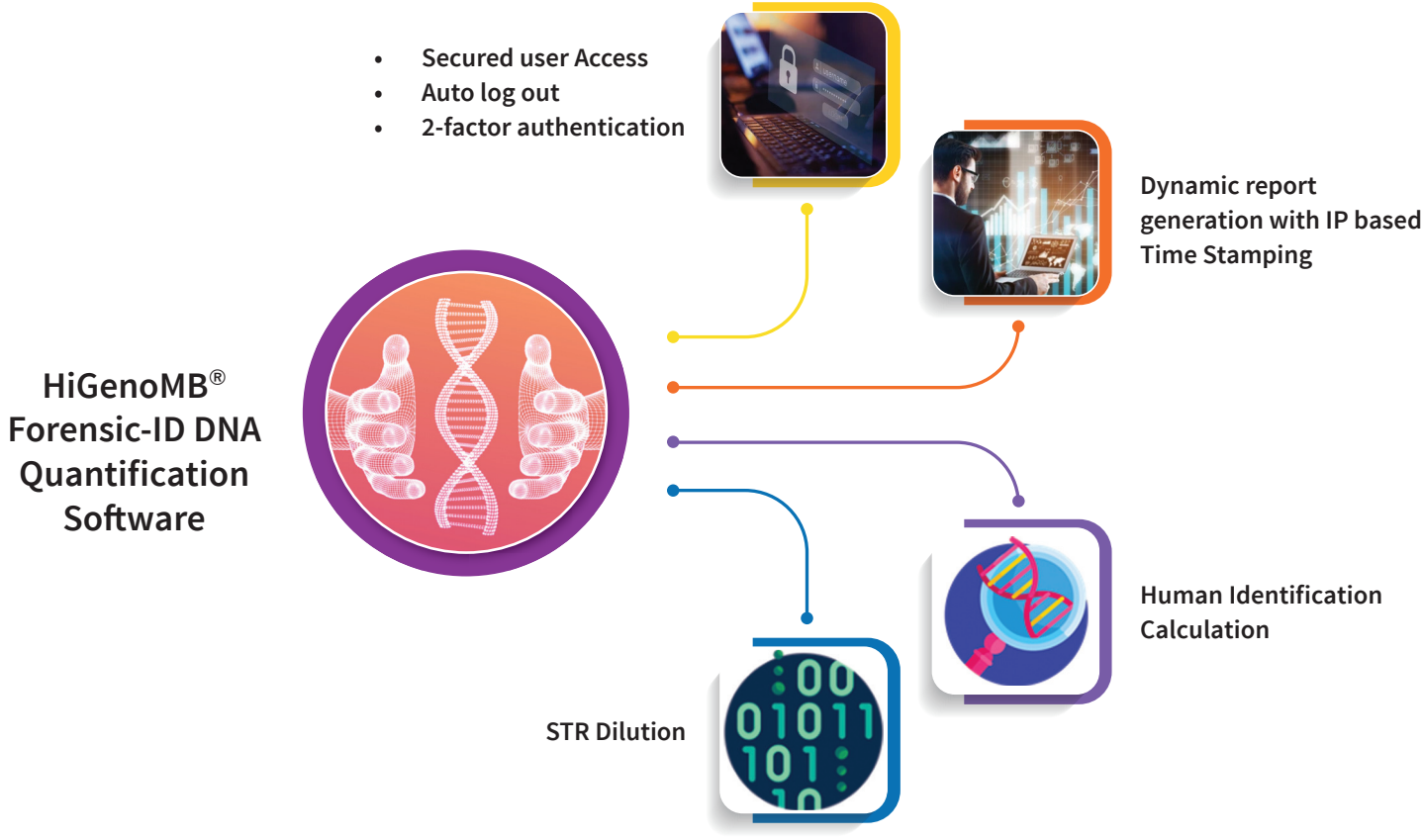


HiGenoMB® Forensic-ID DNA Quantification Software

HiMedia's HiGenoMB® Forensic-ID DNA Quantification Software is a user friendly, Web-Based application developed specifically to assist forensic experts who work on Human Identification (HID). **HiMedia's HiGenoMB® Forensic-ID DNA Quantification Software** is Novel and First open software developed and designed for use with **Insta-Q96® 6.0 (LA1074)**. The software supports all commercially available Human DNA Quantification Kits.

Features

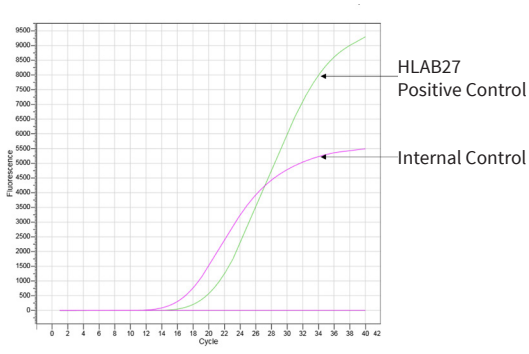
- The **HiMedia's HiGenoMB® Forensic-ID DNA Quantification Software** is designed to perform Real-Time analysis without any data alteration.
- Based on the kit processed in **Insta-Q96® 6.0 (LA1074)** our software automatically gives information about the **Quantity of DNA** and calculates the **Degradation Index (Quality of the DNA), Male:Female Mixtures or Ratio, Sample Inhibition** with **IPC Shift** and **other parameters**.
- The **HiMedia's HiGenoMB® Forensic-ID DNA Quantification Software** also helps to prepare a dilution series to setup various downstream STR experiments.
- The final values are presented using Dynamic Report Generation Algorithm in non-editable reporting format (.pdf) with IP based Time Stamping.
- The software has Secure User Access, which is encrypted using advance cryptography with Auto Logout Facility.



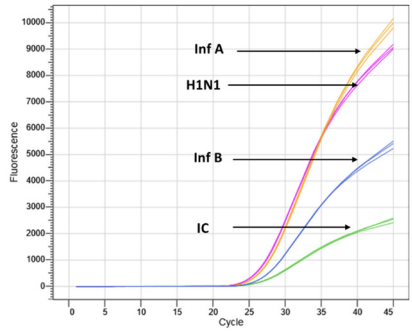
HiGenoMB® Forensic-ID DNA Quantification Software	MBES01-1LC	1lc	On request

Clinical Diagnostics

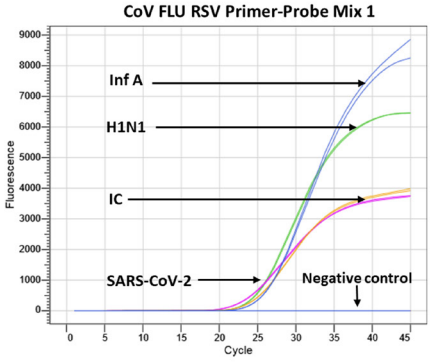
Hi-PCR® HLA-B27 Probe PCR Kit - MBPCR202

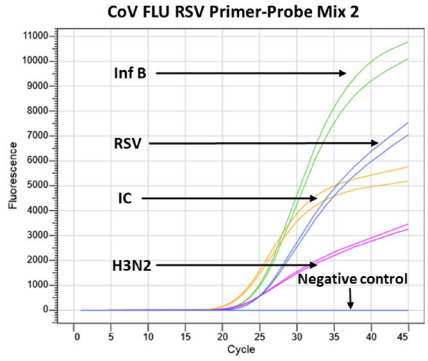


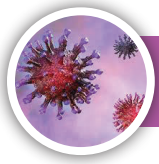
Hi-PCR® Influenza Multiplex Probe PCR Kit - MBPCR263



Hi-PCR® COVID FLU RSV Multiplex Probe PCR Kit - MBPCR270

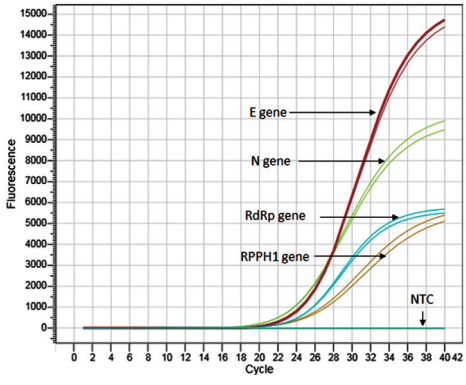






COVID-19 Diagnostics

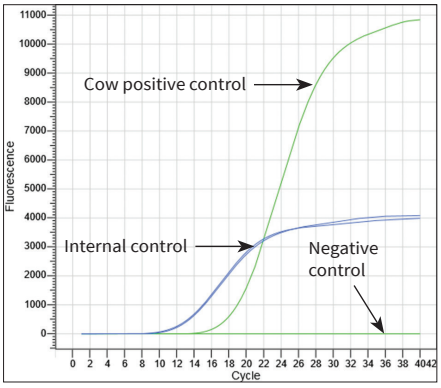
Hi-PCR® Coronavirus (COVID-19) Multiplex Probe PCR kit - MBPCR243



Targets	Average Ct values
N gene	23.76
RPPH1 gene	27.18
E gene	24.35
RdRp gene	25.89

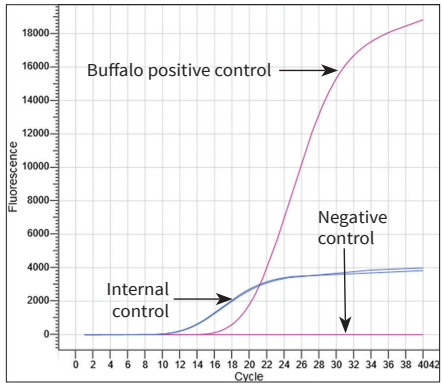
Meat Adulteration Identification

Hi-PCR® Cow Probe PCR Kit - MBPCR139



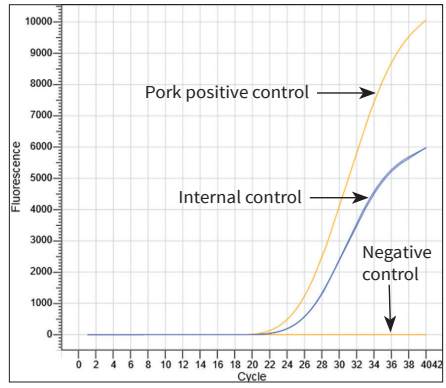
Sample	Ct value
Cow positive control	19.54
Internal control	13.44
Negative control	N/A

Hi-PCR® Buffalo Probe PCR Kit - MBPCR138



Sample	Ct value
Buffalo positive control	20.41
Internal control	13.62
Negative control	N/A

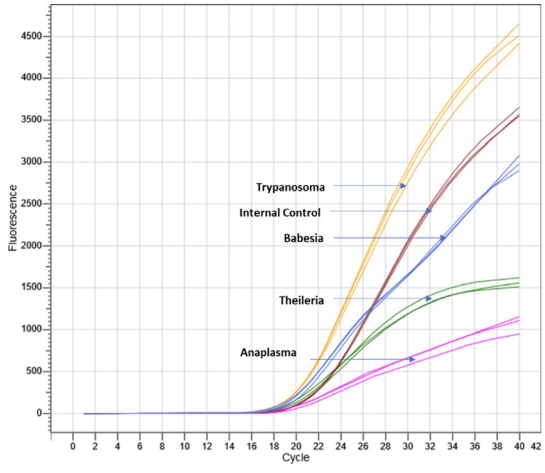
Hi-PCR® Pork Probe PCR Kit - MBPCR136



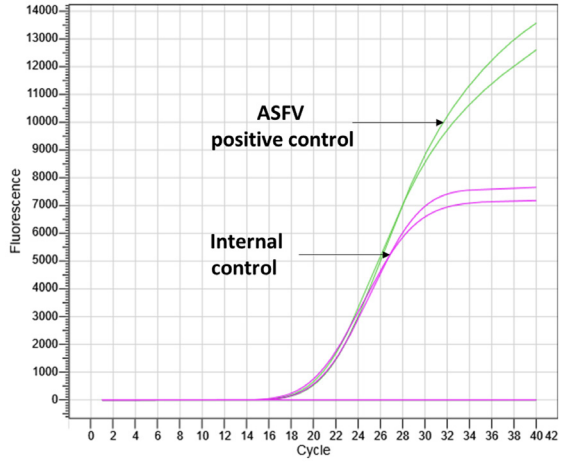
Sample	Ct value
Pork positive control	25.63
Internal control	25.88
Negative control	N/A

Veterinary Diagnostics

Hi-PCR® Protozoan Parasite Multiplex Probe PCR Kit - MBPCR252

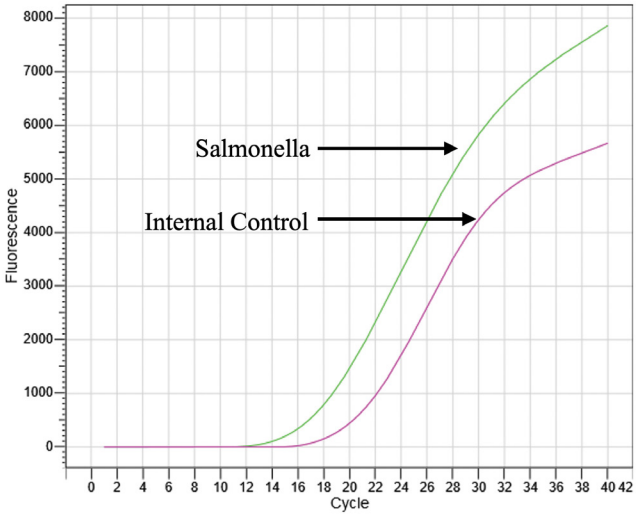


Hi-PCR® African Swine Fever Virus (ASFV) Probe PCR Kit - MBPCR256



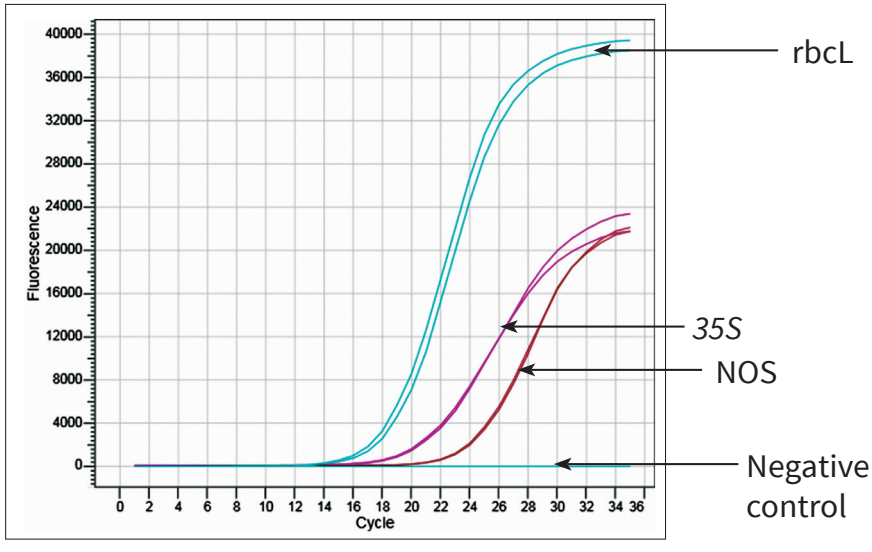
Food Diagnostics

Hi-PCR® Salmonella Food Probe PCR Kit - MBPCR273



GMO Detection

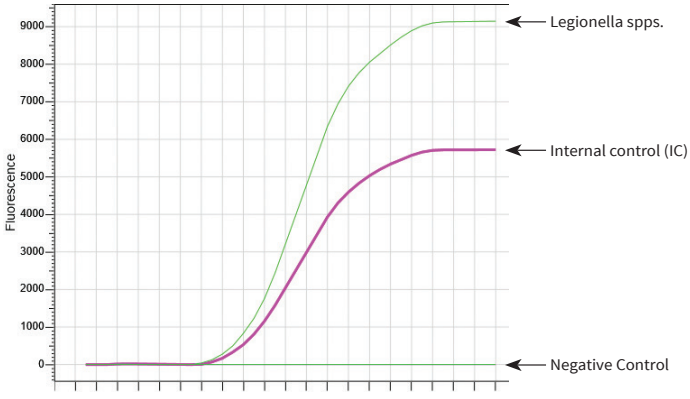
Genetically Modifed Organism detection in cotton plant - MBPCR174



Gene	Ct value
35S	15.43, 15.98
NOS	20.19, 19.89
rbcL	13.9, 13.4
Negative Control	N/A

Water & Beverage Diagnostics

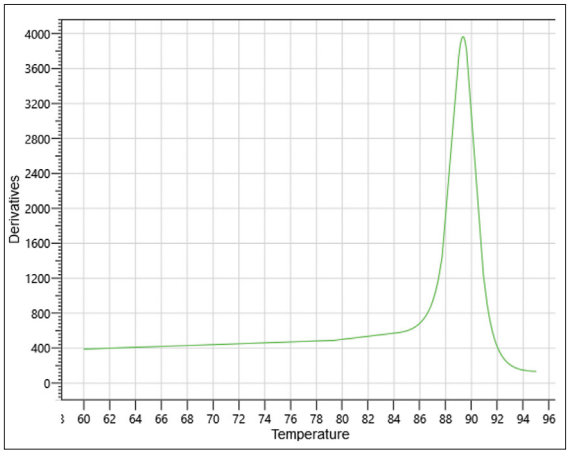
Legionella spp. Detection in Water - MBT142



Sample	Ct value
Positive control	11.56
Internal Control	12.67
Negative control	N/A

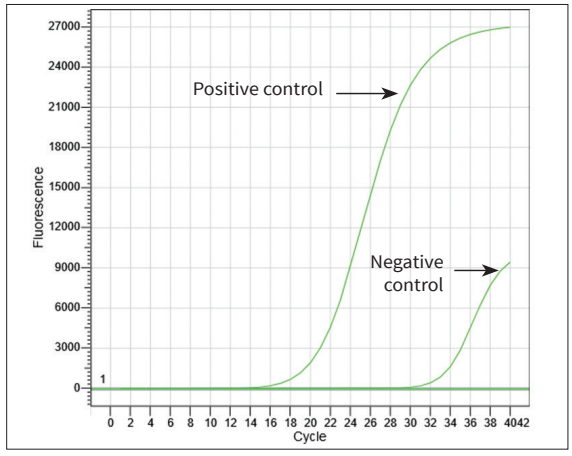
Biopharma / Research Applications

Hi-PCR® 16S rRNA SYBr PCR Kit - MBPCR087



Sample	Ct value
Positive Control, Ct	20.05
Negative Control, Tm	89.3

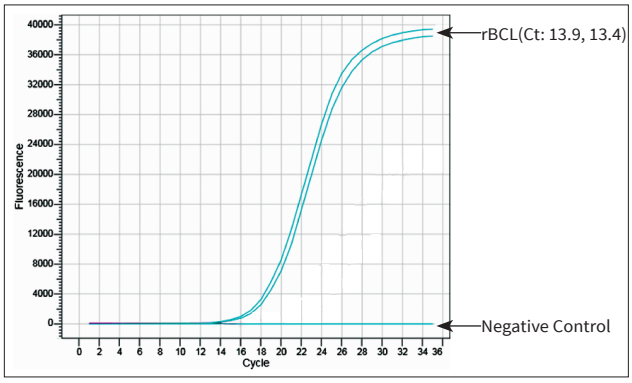
Hi-PCR® 18S rRNA SYBr PCR Kit - MBPCR088

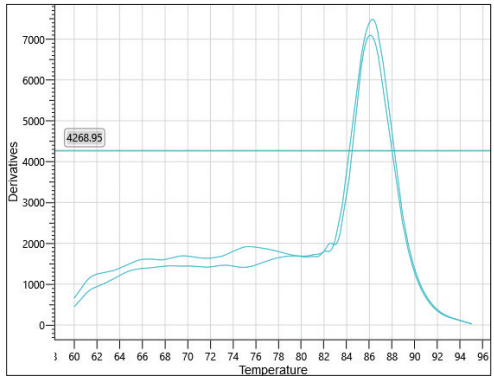


Sample	Ct value
Positive control	16.0
Negative control	31.0

Universal Plant Identification

Plant Detection Kit - MBPCR189

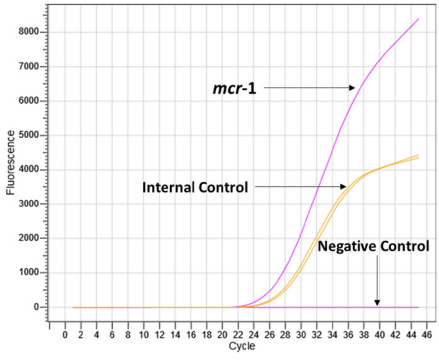




Sample	Melt curve (°C)
rBCL (Plant 1)	86.1
rBCL (Plant 2)	86.3
Negative Control	N/A

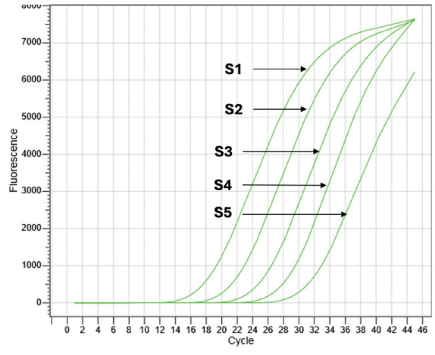
Anti Microbial resistance (AMR) Quantification

Hi-PCR® Colistin Resistance Probe PCR Kit - MBPCR209



Sample	Ct value	
mcr-1 Positive Control	27.19	--
Internal Control	28.23	27.88

Hi-PCR® Colistin Resistance Encoding Gene Quantification Probe PCR Kit - MBPCR228



Standard	Concentration	Copy number
S1	2	1 x 10^5
S2	0.2	1 x 10^4
S3	0.02	1 x 10^3
S4	0.002	1 x 10^2
S5	0.0002	1 x 10^1

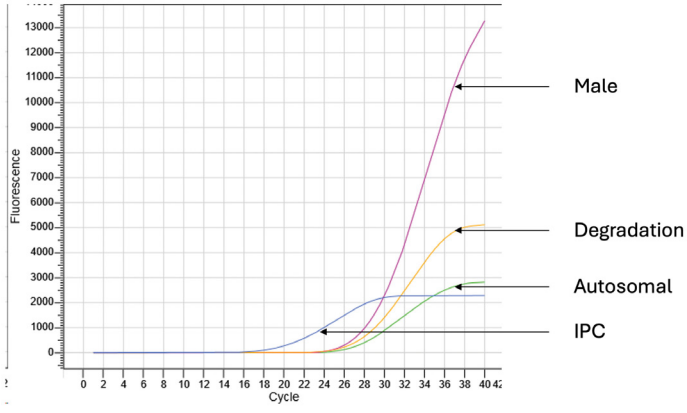
Forensic

Forensic analysis of human DNA (nuclear and mitochondrial) in forensic samples can be a challenging task. Factors like degradation and/or small amounts of DNA can impossibility the analysis due to the lack of quality material to use in the assays. Real-time PCR (quantitative PCR, qPCR) is currently a well-established technology for detection and quantification. The quantification after DNA extraction is an important step, which provides information about the amount of DNA present in unknown samples. This data can be used successfully to obtain better quality results preserving the sample for further analysis.

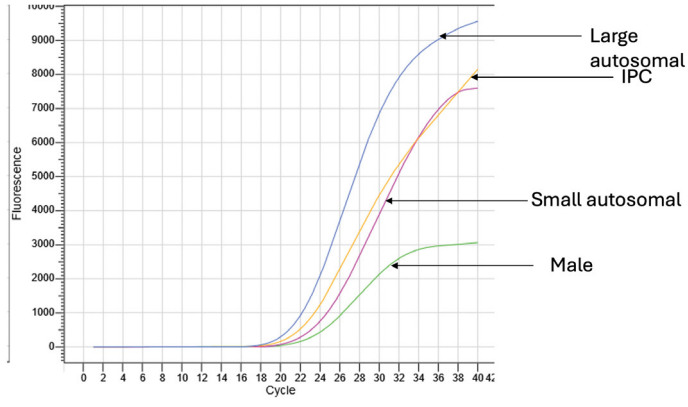
With its distinctive set of features, HiMedia's Insta Q96® 6.0 Real-Time PCR system (LA1074) from HiMedia Laboratories is an open and exclusive Real-Time PCR system for forensic applications. This user-friendly, cutting-edge equipment can track amplification cycle by cycle, providing precise and accurate DNA quantitation. This dependable machine is an open system allowing the user to select the reagents and test kits to be used. The machines already have factory calibrated filters, therefore using a competitor's kit does not necessitate calibration.

HiGenoMB® Forensic-ID DNA Quantification Software, the first, novel, user-friendly, open software is developed exclusively to support forensic professionals who work on quantification of human DNA. This software is coupled with HiMedia's Insta Q96® 6.0 Real-Time PCR system. The software supports all commercially available human DNA quantification kits, just like the equipment does. When setting up various downstream applications, the software automatically provides information on the quantity of DNA and other important parameters viz, degradation index along with quality of DNA, male:female ratio, internal positive control (IPC) shift and autosomal/male dilution series. It is lightweight software that can work on low internet bandwidth and is enabled with all necessary security features such as data encryption, auto-logout facility, no data storage, and no data alteration.

Hi-PCR® Human DNA Quantification Kit - MBPCR266



Competitor Data 1



Competitor Data 2

Consumables For Real-Time PCR

PCR Tubes

CG282	PCR Tubes, Flat lid
CG282E	PCR Tube, Flat Lid
PW1255	PCR Tubes, Thin walled

PCR Blocks

PR3	PCR Blocks (Semi-skirt)
PR5	PCR Blocks (Non-skirt)
PR19	PCR Blocks (Non-skirt)

Premium Grade Barrier Tips

LA749A	Max capacity 10 µL
LA750A	Max capacity 20 µL
LA751A	Max capacity 200 µL
LA859A	Max capacity 1000 µL

Sealing Films for PCR Blocks

PR18	Optical Sealing Film 96 well PCR plate
PR21	Polypropylene Sealing Film
PR28	Hi-PCR® Applicator foor seal in film

PCR Strips

PR12	8-Strip PCR Tube with dome cap – Clear
PR15	8-Strip PCR Tube Flat caps – Clear
PR17	8-Strip tubes & optically clear flat caps for Real-Time PCR
PR23	8-Strip PCR tubes & optically clear with attached flat caps for Real-Time PCR

Pipettes

MBLA008	Q4Pet Autoclavable Micropipette (Capacity : 100-1000µL)
MBLA009	Q4Pet Autoclavable Micropipette (Capacity : 0.5-10µL)
MBLA010	Q4Pet Autoclavable Micropipette (Capacity : 2-20µL)
MBLA011	Q4Pet Autoclavable Micropipette (Capacity : 10-100µL)
MBLA012	Q4Pet Autoclavable Micropipette (Capacity : 20-200µL)
MBLA013	Q4Pet Autoclavable Micropipette (Capacity : 500-5000µL)
MBLA033	Q4Pet Autoclavable Micropipette (Capacity : 10-200µL)
MBLA015	Q4Pet Autoclavable Micropipette (Capacity : 50-1000µL)

Kits for Real-Time PCR

MBPCR024	Hi-PCR® Salmonella SYBr PCR Kit
MBPCR059A	Hi-PCR® Generic E. coli Food SYBr PCR Kit
MBPCR087	Hi-PCR® 16S rRNA SYBr PCR Kit
MBPCR088	Hi-PCR® 18S rRNA SYBr PCR Kit
MBPCR097	Hi-PCR® Fungal ITS SYBr PCR Kit
MBPCR099	Hi-PCR® Salmonella Probe PCR Kit
MBPCR101	Generic Dengue Detection Kit (One-Step Real-Time Probe Based PCR)
MBPCR105	Hi-PCR® Human Papilloma Virus (HPV) Genotyping (Multiplex) Probe PCR Kit
MBPCR108	Hi-PCR® Mycobacterium tuberculosis Probe PCR Kit
MBPCR111	Hi-PCR® Malaria Probe PCR Kit
MBPCR112	Chikungunya Detection Kit (Real-Time Probe Based PCR)
MBPCR121	Hi-PCR® Brucella SYBr PCR Kit
MBPCR122	Hi-PCR® Mycoplasma gallisepticum SYBr PCR Kit
MBPCR123	Hi-PCR® Theileria SYBr PCR Kit
MBPCR124	Hi-PCR® Peste des petits ruminants (PPR) SYBr PCR Kit
MBPCR125	Hi-PCR® Babesia bigemina SYBr PCR Kit
MBPCR127	Hi-PCR® Capripox SYBr PCR Kit
MBPCR128	Hi-PCR® Infectious Bovine Rhinotracheitis (IBR) SYBr PCR Kit
MBPCR129	Hi-PCR® Hemorrhagic septicemia (HS) SYBr PCR Kit
MBPCR131	Hi-POR® Extended Spectrum B-Lactamases (ESBLs) Gene (Multiplex) Probe PCR Kit
MBPCR132	Hi-PCR® Carbapenemase Gene (Multiplex) Probe PCR Kit
MBPCR133	Hi-PCR® Methicillin Resistant Staphylococcus aureus (MRSA) (Multiplex) Probe PCR Kit
MBPCR134	Hi-PCR® Vancomycin Resistant Enterococci (VRE) (Multiplex) Probe PCR Kit
MBPCR136	Hi-PCR® Pork Probe PCR Kit
MBPCR137	Hi-PCR® Dengue Serotyping Probe PCR Kit
MBPCR138	Hi-PCR® Buffalo Probe PCR Kit
MBPCR139	Hi-PCR® Cow Probe PCR Kit
MBPCR141	Hi-PCR® Cow-Buffalo Probe PCR Kit
MBPCR142	Hi-PCR® Cattle Sex Determination Probe PCR Kit
MBPCR162	Hi-PCR® Brucella Probe PCR Kit
MBPCR163	Hi-PCR® Pox Probe PCR Kit
MBPCR164	Hi-PCR® Infectious Bovine Rhinotracheitis (IBR) Probe PCR Kit
MBPCR165	Hi-PCR® Theileria Probe PCR Kit
MBPCR166	Hi-PCR® Newcastle Disease Virus (NDV) Probe PCR Kit
MBPCR167	Hi-PCR® Mycoplasma gallisepticum Probe PCR Kit

Kits for Real-Time PCR

MBPCR168	Hi-PCR® Peste des petits ruminants (PPR) Probe PCR Kit
MBPCR169	Hi-PCR® Hemorrhagic Septicemia (HS) Probe PCR Kit
MBPCR189	Hi-PCR® Plant SYBr PCR Kit
MBPCR191	Hi-PCR® Enterocytozoon hepatopenaei (EHP) Probe PCR Kit
MBPCR196	Hi-PCR® Salmonella Quantification Probe PCR Kit
MBPCR198	Hi-PCR® E. coli O157:H7 Quantification Probe PCR Kit
MBPCR199	Hi-PCR® A1A2 Probe PCR Kit
MBPCR214	Hi-PCR® Trypanosoma evansi SYBr PCR Kit
MBPCR215	Hi-PCR® Brucella canis SYBr PCR Kit
MBPCR224	Hi-PCR® Blue Tongue Virus (BTV) SYBr PCR Kit
MBPCR228	Hi-PCR® Colistin Resistance Encoding Gene Quantification Probe PCR Kit
MBPCR235	Hi-PCR® Milk Buffalo Probe PCR Kit
MBPCR236	Hi-PCR® Milk Cow Probe PCR Kit
MBPCR237	Hi-PCR® Milk Adulteration Probe PCR Kit (Bovine)
MBPCR238	Hi-PCR® Generic E. coli Probe PCR Kit
MBPCR239	Hi-PCR® Total Coliform Probe PCR Kit
MBPCR179	Hi-PCR® Dengue-Chikungunya Multiplex Probe PCR Kit
MBPCR243	Hi-PCR® Coronavirus (COVID-19) Multiplex Probe PCR Kit
MBPCR246A	Hi-PCR® Zoonotic Coronavirus (COVID-19) Multiplex Probe PCR Kit (3 Channel)
MBPCR246B	Hi-PCR® Zoonotic Coronavirus (COVID-19) Multiplex Probe PCR Kit (4 Channel)
MBPCR143	Hi-PCR® Horse Probe PCR kit
MBPCR144	Hi-PCR® Sheep Probe PCR kit
MBPCR270	Hi-PCR® COVID FLU RSV Multiplex Probe PCR Kit
MBPCR273	Hi-PCR® Salmonella Food Probe PCR Ki
MBPCR255	Hi-PCR® COVID-19 Triplex Probe PCR Kit
MBPCR266	Hi-PCR® Human DNA Quantification Kit
MBPCR254	Hi-PCR® EHP-WSSV Detection and Quantitation Multiplex Probe PCR Kit

Technical Parameters of the Product

Product Name	Insta-Q48™ Real-Time PCR Detection System	
Product Code	**LA1023**	**LA1024**
No. of channels	4	2
Multiplexing	4 color	2 color
Sample Capacity	48x0.2 mL PCR tubes, 6x8 (0.2 mL) Strips, ***optical clear bottom***	
Dynamic Range	1~10^{10} Copies	
Excitation Wavelength	450-700nm	450-550nm
Emission Wavelength	500-700nm	500-600nm
Detected Flourescence	F1: FAM, SYBR Green I F2: VIC, HEX, TET, JOE F3: ROX, TEXAS-RED F4: CY5	F1: FAM, SYBR Green I F2: VIC, HEX, TET, JOE
Passive reference dye	**ROX or other not required (optional)**	
Block Temp. Range	4~105°C (Minimum Increment 0.1°C) Soak Low Temperature, Conservation Function	
Heating / Cooling Rate	4.0°C/s (max)	
Temp. Control Accuracy	≤ ± 0.1°C	
Temp. Fluctuation	≤ ± 0.1°C	
Temp. Uniformity	≤ ± 0.3°C(Tested at 55°C)	
Temp. Control Mode	Block / Tube Simulation Mode (Automatic Control Based On Sample Volume)	
Sample Volume Range	5~100 µL	
Gradient Temp. Range	3 Temperature controlled blocks in the range of (Maximum) ±6°C	
Hot-Lid Temp. Range	30~110°C (Adjustable Default 105°C), **Automatic Hot-Lid**	
Flourescence Detection Repeatability	Within 5%	
Scan Mode	Entire Block	
Program	Max 20 Segments for each Program, Max 99 Cycles	
Operation Mode	Continuous	
Scan Period	2 seconds	3.5 secsonds
Feature Function	• Absolute Quantification • **Automatic Data Analysis** • Melt Curve • Genotyping • Gradient • Correction • Customized Parameters	• Relative Quantification • Multi-Channel Crosstalk Correction • HRM • SNP Analysis • Background • **Automatic Gain** • **No passive reference dye required**
Operating System	Microsoft: Windows 8/ Windows 10, Software: Excel 2007, 2010, 2013 and Office 365	
PC Configuration	Memory: 4GB RAM, Hard Disk: 500GB, CPU: Intel i3 & latest	
Power Supply	100 - 240V ~ 50/60Hz 600W	
Dimensions (LxWxH) / Weight	384 x 353 x 348 / 15 kg	
Socket	USB Adapter, Bluetooth Adapter	
Certifications	**CE & IVD Approved**	

Technical Parameters of the Product

Product Name	Insta-Q96® Plus	Insta-Q96® - 6.0
Product Code	**LA1073**	**LA1074**
No. of channels	5	6
Multiplexing	5 Color	6 Color
Sample Capacity	96x0.2 mL Well PCR plate/ tubes, 12x8 (0.2 mL) Strips , ***optical clear bottom***	
Dynamic Range	1~10^{10} Copies	
Excitation Wavelength	300-800nm	
Emission Wavelength	500-800nm	
Detected Flourescence	F1: FAM, SYBR F2: HEX, TET, JOE, VIC F3: ROX, TEXAS-RED F4: CY5 F5: CY5.5	F1: FAM, SYBR F2: HEX, TET, VIC, JOE, NIC F3: ROX, TEXAS-RED F4: CY5 F5: CY5.5 F6: CY3, NED, TAMRA
Passive reference dye	**ROX or other not required (optional)**	
Block Temp. Range	4~105°C (Minimum Increment 0.1°C) Soak Low Temperature, Conservation Function	
Heating / Cooling Rate	4.0°C/s (max)	
Temp. Control Accuracy	≤ ± 0.1°C	
Temp. Fluctuation	≤ ± 0.1°C	
Temp. Uniformity	≤ ± 0.3°C	
Temp. Control Mode	Block / Tube Simulation Mode (Automatic Control Based On Sample Volume)	
Sample Volume Range	5~100 µL	
Gradient Temp. Range	1~36°C	
Hot-Lid Temp. Range	30~110°C (Adjustable Default 105°C), **Automatic Hot-Lid**	
Flourescence Detection Repeatability	Within 5%	
Scan Mode	Entire Plate or Designated Line	
Run Time	Max 20 Segments for each Program, Max 99 Cycles	
Operation Mode	Continuous	
Scan Period	5.5 seconds	
Feature Function	• Absolute Quantification • **Automatic Data Analysis** • Melt Curve • Genotyping • Gradient • Correction • Customized Parameters	• Relative Quantification • Multi-Channel Crosstalk Correction • HRM • SNP Analysis • Background • **Automatic Gain** • **No passive reference dye required**
Operating System	Microsoft: Windows 8/ Windows 10, Software: Excel 2007, 2010, 2013 and Office 365	
PC Configuration	Memory: 4GB RAM, Hard Disk: 500GB, CPU: Intel i3 & latest	
Power Supply	100 - 240V ~ 50/60Hz 600W	
Dimensions (LxWxH)/ Weight	410mm x 386mm x 352mm / 28 kg	
Socket	USB Adapter, Bluetooth Adapter	
Certifications	**CE IVD, ANVISA**	**CE IVD, ANVISA, SWAGDAM**

Literature code : TL677_04/Insta Q Series/0524

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