

ALL INDIA INSTITUTE OF MEDICAL SCIENCES ANSARI NAGAR, NEW DELHI-110029 Stores Section (DO)

Tender Refs. 11/SO(DO)/Path/PAC/2025-26/M&E

Dated: -05.08.2025

Subject: - Procurement of Droplet Digital PCR System -Qty. - 01 No. on Proprietary basis for the department of Pathology..

The request has been received from department of Pathology for "Droplet Digital PCR System - Qty. - 01 No. on PAC basis" form M/s Bio-Red Laboratories Inc. on Proprietary basis along with technical specifications, OEM Propriety Certificate and Departmental PAC Certificates.

The above documents are beaing uploaded for open information to submit objection, comments, if any, from any manufacturer or their authorized distributer regarding proprietary nature of equipment /item within issue of 15 days giving tender reference No. 11/SO(DO)/Path/PAC/2025-26/M&E. The Comments should reach to the office of Sr. Store Officer (DO), Stores Section (DO), 1st Floor Animal House Building, Near Gate No.02, AIIMS New Delhi-110029 on or before 21/08/2025 up to 04:00 p.m. failing which it will be presumed that any other vendor is having no comment to offer and case will be decided on merits.

Sr. Stores Officer (DO

Enclose: related documents

- 1. PAC Certificate
- 2. Technical Specifications
- 3. Performa Invoice

TECHNICAL SPECIFICATIONS OFDROPLET DIGITAL PCR SYSTEM (on proprietary basis)

(Quantity=01)

Estimated Cost-1.8Cr

Estimated Life Cycle cost- 2.3Cr

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26	The equipment must be able to read multiplexing assays run with probe base as well as dye base chemistry	
27	The reader must be able to read fluorescence data from each single droplet individually.	
Plate	Sealer	1 No
28	Plate Sealer suitable for 96 well plate, with support block, sealing frame and power chord.	
29	One pack of 100 nos. of compatible seals should be supplied.	
Thern	nal Cycler:	1 No
30	Gradient 96 deep-well deep-wellPCR which can be used as a standalone PCR machine and having	1
	gradient range of 30-100°C with temperature differential range of 1-24°C	•
31	Model with graphical touch screen cum display should be provided at no extra cost to the user	
Softw		
32	Software packages for droplet Digital PCR applications which may include features that provide to finegative droplets for each sample to fit to a Poisson algorithm; display of fluorescence amplitude per droplet for all six channels (FAM, Hex/VIC, Cy5, Cy5.5, ROX and ATTO 590), show multipper droplet for all six channels, Computes Absolute quantitation (copies/µl) for each sample; per copy number variation analysis, Calculates fractional abundance of mutant target in wild-type background for mutation detection; setting automatic/manual threshold values for entire sample or for individual samples, merging results from replicate wells, graphical and tabular representations.	ude plex da forms e plate
33	data, Data acquisition and analysis, report generation, export results, etc.	A
34	Latest available, Licensed version of the software should be supplied.	AC //20
34	The software should not require manual setting of exposure & camera gain for the optics bench or run set up to avoid run to run variation.	during
35	The Software should not use any reference dye to detect and count positive and negative drople:	to to
	avoid bias	is to
Comp		. 4
36	Latest available and factory recommended computer/ all-in-one workstation should	1 No
	be provided for control, acquisition and analysis: 8 th generation Intel i7 processor, 1TB or higher SSD, genuine latest compatible Window professional 64-bit operating system, 32 GB or higher RAM, 1920 x 1080 resolution 23" or larger high definition colour LED monitor, at least one USB 3.0 port, 2 GB GPU graphics card, keyboard & mp; mouse.	INO
37	Computer system should be inclusive of all required hardware, drivers, adequate storage and RAM modules, etc.	
38	Computer system should have sufficient memory to store at least 1000 previous runs data	
A GOVERN	mables:	
39	The vendor must have comprehensive portfolio* of Assays and Kits across different Applications-Mutation Detection, Copy Number Determination, Genome Edit Detection, Gene Expression, Expert Design Assays, Residual DNA Quantification and Library Quantification. Wet Lab Validated Assays must be available for the mutation detection and CNV analysis of more than 200 Oncology gene markers.	
Prefer	red parameters	
40	Flexibility to take Time-breaks during workflow; droplet generation-PCR-Readout	
41	No Special temperature window for instrument operation	
42	Flexibility to use small or high number of samples throughput without wasting consumables	
43	All Workflow components manufactured by same vendor for consistent performance delivery	
Servic	e	
44	The system should be upgraded free of cost during the warranty /CAMC period, if any newer version of software is launched. If the newer version of software requires hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.	

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45	Any recurrent consumables required for running the machine as suggested by OEM, should be separately listed and their price should be separately quoted as applicable, which would be fixed for the lifetime of the equipment. If any machine specific consumable is not listed, the vendor will provide the consumables free of cost.	
46	Warranty: 2 years comprehensive warranty including spares and third-party supplied parts if any, and CAMC for the next 8 years should be quoted (not optional). The CAMC price should be included into the final quoted price of the instrument	
47	The supplier should have technical and application support from the principal company in India, preferably Delhi-NCR	
48	Onsite application training of staff and continuous technical support from qualified application scientist and service engineers should be provided by the vendor at and when required, estimated 4 times/ year	
49	The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation	
50	The pricing of all instrument-specific reagents and consumables should be quoted and remain fixed for lifetime of the equipment.	
51	Penalty clause would be applied at a rate of 0.5% of machine cost/ day, if it remains at not working condition for ≥7 days	
52	System should have open interface or compatibility for LIS system. Ability to import/export sample/patient data from/to hospital LIS system. It Should be ensured by the vendor and all software required should be supplied at free of cost to the user for integration.	
53	A suitable online UPS and battery backup sufficient to cover power outage of 60 minutes should be provided at least one with each machine.	
54	The system should be US FDA certified/ European CE certified.	
55	Final acceptance of the machine shall be based on the mandatory departmental physical demonstration and evaluations considering previous technical experiences and support extended by a bidder/ manufacturer, if any.	ent man ay

Dr. Sandeep Mathur

(Prof. of Pathology)

AIIMS

Dr. Shipra
Dept of of Pathology,
AIIMS

Dr. Namrata Makkar, Representative of Med. Superintendent, AIIMS

Prof. Priti professor pamolosy LHMC, New Delhi s New Delhi 1 Dr. Prasenjit Das (Prof. of Pathology) Officer-In-Charge Store

AIIMS

Dr. Saumyaranjan Mallick, Dept of of Pathology, AIIMS

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Dr. Ashutosh Halder Prof. & HOD, Reproductive Biology AIIMS

Prof. Nadeem Tanveer, UCMC, Delhi

Dr. Nadeem Tanveer
Professor
Department of Pathology
UCMS & GTB Hospital

Droplet Digital PCR- Total estimated annual tests

Speciality	Estimated number of tests in a year	Kit/type	Approx. cost of 1 primer set	Minimum primer set	Multiplex assay cost	Consumable Cost per well	Total per test	Total cost in Rs
Lung and Thoracic Pathology	400	Mutation- EGFR	549	3	1647	440	2087	834800
Breast and Gynae pathology	80	Mutation detection- POLE	549	6	3294	440	3734	298720
Gastrointestinal Pathology	40	Mutation	549	3	1647	440	2087	83480
Endocrine pathology	20	Mutation detection	549	3	1647	440	2087	41740
Pediatric Pathology	30	Mutation	549	3.	1647	440	2087	62610
Pediatric Pathology	30	CNV	549	3	1647	440	2087	62610
Total	600					.1		138396
6 (0)	12						GST@12%	166075
74							G TOTAL	Rs.1550035

Total estimated annual cost- Fifteen Lakh fifty thousand and thirty-five rupees only

LIST OF REQUIRED CONSUMABLES FOR QX600 AUTO DG:

SKU	Description	Qtv	List Price
12001925	DDPCR PLATES 96-WELL, SEMI-SKIRTED	<u> </u>	13835
1814040	PIERCEABLE FOIL HEAT SEAL		0100
1864108	DG32 CARTRIDG, QX100/QX200 DG		3130
1864121	PIPET TIPS AUTO DG 4X(10X96)	1 ~	130410
1864125	WASTE BIN AUTO DG(QX100/QX200)		2006
1863004	DROPLET READER OIL,2X1000 ML/B		117090
1863024	DDPCR SMX PRBS NODUTP 500RXN	2	43565
1863052	2X BUFFER CONTRL KIT, 2X4.5ML		23125
1864022	ONE-STEP RT-DDPCR ADV KIT 500	1 0	219680
1864110	AUTO DG OIL PBS (QX100/QX200)	1 <	58945
1864112	AUTO DG OIL EG (QX200)		53240
12015172	ddPCR Microsatellite Instability (MSI) Kit 200 x 20 ul reactions		562430

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	PROPRIETARY/ARTICLE CERTIFI	NEW DELHI 110029 CATE (PAC) Machinery & Equipment
i)	The Indented Goods are manufactured By	Bio-Rad Laboratories Inc
ii)	Item Name	Droplet Digital Polymerase Chain Reaction (PCR)
iii)	Model No	QX600 with Automated Droplet Generator
iv)	Vital Technical Performance parameters required which make the requirement proprietary	 Upto 12 targets detection in a single well (12 multiplexing of targets/well), from 6 fluorophores (FAM,HEX/VIC,Cy5, Cy5.5, ROX & ATTO) Multiplexing possible with Dye based (Evagreen) Chemistry Droplet based partitioning and fluorescence (data) detection and analysis from each partition (Droplet) individually, using photomultiplier tubes Post PCR, droplet based amplification products can be recovered for validation using any other orthogonal technologies More than 10,000 publications globally, with 100+ installations in India.
)	No other Make or Model is acceptable for the following reasons:	 In other digital PCR models (other than Bio-Rad's ddPCR) there is a mandatory requirement of a passive reference dye for data analysis; restricting the multiplexing capacity to maximum 4-5 targets The fluorescence detection/data capturing in any other digital PCR models is based on images which are captured using CMOS camera; thus compromising on sensitivity, accuracy and reproducibility of data. Other digital PCR models requires readjustments of fluorescence intensities for data representation and analysis.
er.	Signature of Indenter (Demanding Officer)	Countersigned (head of the Department)



Bio-Rad Laboratories, Inc. Life Science Group 2000 Alfred Nobel Drive Hercules, California 94547 Phone: 510-741-1000

Fax: 510-741-100

PROPRIETARY CERTIFICATE

This is to certify that the following items:

17007769	QX600 Droplet Digital PCR System
12013328	QX600 Droplet Reader
1864002	QX200™ Droplet Generator
1864101	Automated Droplet Generator

are products of Bio-Rad Laboratories, Inc., 6000 Alfred Nobel Drive, Hercules CA 94547 USA.

The QX200, QX600, and AutoDG Droplet Digital PCR Systems and/or their use is covered by claims of U.S. patents, and/or pending U.S. and non-U.S. patent applications owned by or under license to Bio-Rad Laboratories, Inc., including, but not limited to, U.S. Patent Nos. 8,730,479, 9,089,844; 9,126,160; 9,132,394; 9,156,010; 9,216,392; 9,248,417; 9,347,059; 9,500,664; 9,623,384; 9,636,682; 9,649,635; 10,099,219; 10,258,988; 10,272,432; and 10,378,048

Authorized Signatory

Patricia Gee

Regulatory Affairs Representative

Bio-Rad Laboratories Inc.

Life Science Group

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www.bio-rad.com

GST No.: 06AAACB3202A1ZR
CIN No.: U32109HR1996PTC107956

December 17, 2024

Justification for Proprietary Article Certificate Procurement for QX600 Droplet Digital PCR System

No other make/brand will be suitable for following tangible reasons:

- Dynamic partitioning method offers randomized distribution of Nucleic acids and PCR reagents (master-mix, Primer-Probes/ Primers, etc.), which are compromised at other Digital PCR systems.
- 2. Highest number of recorded publications across more than 15 application areas (>10500 as of Dec 2024).
- US FDA approved IVD kits are available for selected IVD clinical applications with a pipeline of future kits under license.
- 4. Wide sample throughput ranges from 1 sample to 96 sample/run.
- 5. Post PCR, droplet-based amplification products can be recovered for validation on any other orthogonal technologies.
- **6.** QX-600 Droplet Digital PCR System can easily scale to quantify target concentrations as low as one out of 1,000,000 (0.0001%) total copies.
- 7. QX-600 is the only digital PCR which allows data capture (using photo multiplier tubes) and ultimately the analysis from every single partition (droplet) individually.
- 8. QX-600 workflow involves using a gradient PCR which is essential for assay optimization and also running the assays with variable annealing temperature in a single run; resulting in fastest turn-around time and cheapest running cost.
- 9. QX-600 allows the detection from 6 fluorophores (FAM, Hex/VIC, Cy5, Cy5.5, ROX and ATTO).
- 10. QX-600 Droplet Digital PCR equipment is able to read and analyze upto 12 target- multiplexing in a single well and is able to perform multiplexing with probe as well as dye base chemistries.

The above tangible benefits contributed by the Bio-Rad's QX600 Droplet Digital PCR processes are protected by claims of U.S. patents, and/or pending U.S. and non-U.S. patent applications owned by or under license to Bio-Rad Laboratories, Inc., including, but not limited to, U.S. Patent Nos. 8,730,479, 9,089,844; 9,126,160; 9,132,394; 9,156,010; 9,216,392; 9,248,417; 9,347,059; 9,500,664; 9,623,384; 9,636,682; 9,649,635; 10,099,219; 10,258,988; 10,272,432; and 10,378,048.

Yours sincerely,

For Bio-Rad Laboratories (India) Private Limited

Nitin Sharma Digitally signed by Nitin Sharma Date: 2024.12.17 12:36:48 +05'30'

Nitin Sharma Manager LSG – India For Bio-Rad Laboratories (India) Private Limited

ROHAN JHUSIWALA

Digitally signed by ROHAN JHUSIWALA Date: 2024.12.17

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Rohan Jhusiwala Legal Counsel – India

Please share payment advice at India_Ar@bio-rad.com.
BIO-RAD is a trademark in India.

QX600" AutoDG" Droplet Digital" PCR System Sole Source

Specifications for Reference Use in Sole-Source Justifications

Catalog #17008371

Bio-Rad™ Laboratories, Inc. is the original manufacturer and sole supplier of the QX600 AutoDG Droplet Digital PCR System.

The QX600 AutoDG Droplet Digital PCR (ddPCR™) system provides an absolute measure of target DNA molecules with unrivaled precision, accuracy, and sensitivity. The Automated Droplet Generator partitions samples into thousands of nanolitersized (standard) droplets, each of which is an independent PCR reactor. After PCR on a thermal cycler, droplets are streamed in single file on the QX600 Droplet Reader to count the positive and negative reactions. The QX600 AutoDG ddPCR System delivers an absolute count of the number of target DNA sequences for applications that include mutation detection and gene expression, copy number variation, and viral titer analysis.



Design and Performance Specifications of the QX600 AutoDG **Droplet Digital PCR System**

- 1. Automated Droplet Generator partitions a 20 µl PCR reaction into 20,000 standard droplets.
- 2. Automated Droplet Generator is compatible with up to three DG32 Cartridges, which hold a total of 96 reactions.
- 3. Droplet generation takes approximately 40 minutes for 96 reactions.
- 4. Droplet generation requires 70 µl of Bio-Rad Automated Droplet Generation Oil per reaction (7 ml for 96 reactions).
- 5. Automated Droplet Generator is 66 x 56 x 66 cm (26 x 22 x 26 in.) (WxDxH).
- 6. Droplets are PCR amplified in bulk on a thermal cycler with a 96-well format.
- 7. QX600 Droplet Reader analyzes a full 96-well plate in approximately 3 hours for standard droplets.
- 8. QX600 Droplet Reader performs excitation and detection of up to six fluorescent dyes per droplet. FAM, HEX (or VIC), Cy5, Cy5.5, ROX, and ATTO 590 Dyes can be used.
- 9. QX600 Droplet Reader illuminates and detects fluorescence from each singulated droplet, which eliminates necessity of image optimization.
- 10. QX600 Droplet Reader uses three light-emitting diodes for excitation and differentially detects emission using six avalanche photodiodes (one for each channel).

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BIO RAD

- QX600 Droplet Reader automatically detects fluorescence from all six channels simultaneously during the reading process.
- QX600 Droplet Reader is 66 x 52 x 29 cm (26 x 20 x 11 in.) (W x D x H).
- QX600 Droplet Reader detects droplets without the need for additional passive dyes.
- 14. QX600 Droplet Reader automatically detects signals at interrogation points and gates out poor-quality droplets by measuring multiple criteria, including droplet width, droplet height, and proximity between droplets, using proprietary algorithms.
- QX600 AutoDG ddPCR System has a linear dynamic range of 5 orders of magnitude for detection of input samples.
- QX600 AutoDG ddPCR System enables the distinction between five and six copies of input target nucleic acid between samples.
- 17. Precision of ±10% is achieved.
- One 96-well plate can be used to analyze approximately 2 million standard droplets.
- QX600 AutoDG ddPCR System is compatible with TaqMan probe chemistry and requires the Bio-Rad ddPCR Multiplex.
 Supermix, ddPCR Supermix for Probes (No dUTP), ddPCR Supermix for Probes, One-Step RT-ddPCR Advanced Kit for Probes, or ddPCR Supermix for Residual DNA Quantification.
- QX600 AutoDG ddPCR System is compatible with the temperature gradient on a thermal cycler for optimization of the thermal cycling protocol.
- QX600 AutoDG ddPCR System does not require an external gas tank or gas compressor.
- QX600 AutoDG ddPCR System allows no more than three carryover events per 96 wells for standard droplets.

QX Manager Software Specifications

- Displays fluorescence amplitude values per droplet for FAM, HEX (or VIC), Cy5, Cy5.5, ROX, and ATTO 590 Dyes.
- Shows multiplex data for up to two targets per fluorophore, with up to six fluorophores.
- Computes concentration (copies/µl and copies/20 µl reaction) for each sample.

- Calculates copy number for target of interest using reference target for copy number variation analysis.
- Calculates fractional abundance of mutant target in wild-type background for mutation detection.
- Can automatically set thresholds across the entire plate or for individual wells. Alternatively, the user can manually set thresholds.
- 7. Can merge results from replicate wells.
- Fraction of negative droplets for each sample is fit to a Poisson algorithm to determine absolute copy number of target DNA.
- Allows data to be exported as a .csv file (for use in Microsoft Excel or similar program).
- Allows graphs and tables to be copied to clipboard for printing from software menus.
- Premium edition software provides tools to enable U.S. FDA
 CFR Part 11 compliance, including audit trails and electronic signatures.

Computer Specifications

The QX600 AutoDG ddPCR System includes a computer with QX Manager Software for operating the QX600 Droplet Reader (see Table 1).

Table 1. Lenovo ThinkPad L15 Gen 2 Computer specifications.

System	Specifications
Operating system	Windows 10 Professional
Hard drive	1 TB
Processor	Intel Core i7-1185
RAM	32 GB

Appearances and specifications are subject to change without notice.

BIO-RAD, AUTODG, DDPCR, DROPLET DIGITAL, and QX600 are trademarks of Bio-Rad Laboratories, Inc. in certain jurisdictions. All trademarks used herein are the property of their respective owner.

Purchase of Digital PCR and/or Single-Ceil NGS Sample Preparation products (the "Products") from Bio-Rad Laboratories is subject to Bio-Rad Laboratories, Inc. Standard Terms and Conditions of Sale, which can be accessed at https://www.bio-rad.com/en-us/terms-conditions. Unless we expressly state otherwise in additional Terms and Conditions, no rights are granted for you to distribute or resell the Products. Unless we expressly state otherwise in additional Terms and Conditions, no rights are granted for the development or commercialization of diagnostic assays for use with the Products without a license from Bio-Rad. The Products and/or their use are covered by U.S. and foreign patents and/or pending patent applications owned by or under license to Bio-Rad Laboratories, Inc. See https://www.bio-rad.com/en-us/trademarks.



Bio-Rad Laboratories, Inc.

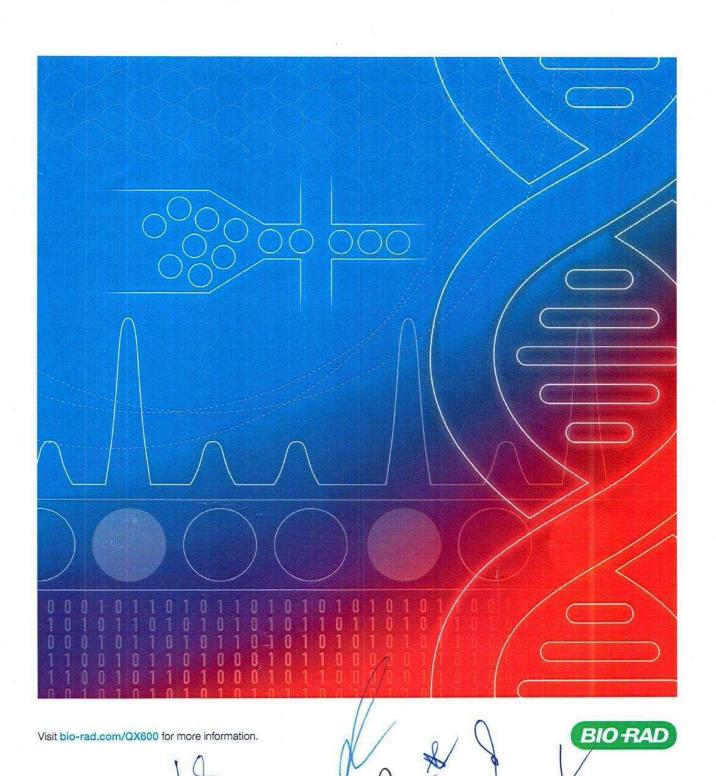
Life Science Group Bulletin 3320 Ver A US/EG







QX600™ Droplet Digital™ PCR System



MULTIPLEXING SIMPLIFIED — GET MORE DATA FROM YOUR PRECIOUS SAMPLES

The QX600 Droplet Digital PCR (ddPCR™) System provides advanced, six-color multiplexing to maximize the number of biomarkers interrogated per well, allowing the preservation of precious samples and reducing laboratory burden. For maximum flexibility, the QX200™ Droplet Digital PCR System assays, consumables, and reagents can be used on the QX600 ddPCR System.



FEATURES AND BENEFITS



SENSITIVE MULTIPLEXING

- 6-color detection capability (FAM/EvaGreen®, HEX/VIC, Cy5, Cy5.5, ROX, and ATTO 590)
- Quantification of 12 targets in a single well
- Absolute quantification with 0.1% or better sensitivity



ACCURATE AND REPRODUCIBLE RESULTS

- Confidence in your results the system has been qualified by traceable material from the National Measurement Institute of Australia (NMIA)
- Reproducible results market-leading ddPCR technology has been cited in reproducibility studies



PORTFOLIO COMPATIBILITY

- Same assays, reagents, and consumables as QX200 Droplet Digital PCR System
- Extensive menu of existing ddPCR Assays for EvaGreen® and hydrolysis probe chemistry



POWERFUL SOFTWARE

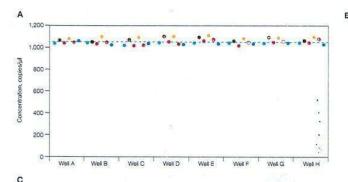
- Results that are easy to analyze
- Premium edition available featuring audit trails and tools for U.S. FDA 21 CFR Part 11 compliance
- Premium edition supports assay protocol files for automated data analysis and reporting





SIX-COLOR DETECTION CAPABILITY WITH HIGH ACCURACY, PRECISION, AND REPRODUCIBILITY

The QX600 ddPCR System offers six-color multiplexing for the clear discrimination of multiple targets and more accurate and reproducible quantification with six-color detection capability (FAM/EvaGreen®, HEX/VIC, Cy5, Cy5.5, ROX, and ATTO 590). It has been qualified by traceable material from the National Measurement Institute of Australia.



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	QX600 ddPCR	Other Digital PCR
Metric	System, %	Platform, %
Accuracy, difference from NMIA target concentration	0.7	3.2"
Precision, % CV, mean concentration across a plate	1.7	3.5–3.8**

NMIA standard, data shown, 2023.

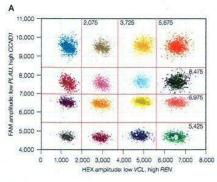
" NIST standard, as published by competitor, 2023.

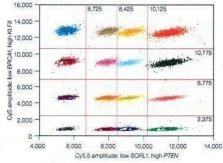
" ERBB2 assay, as published by competitor, 2022.

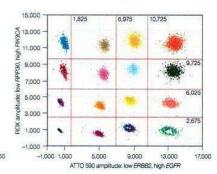
Accurate, precise, and reproducible data of a known metrology standard for six targets. A, concentration plot shows accurate, precise, and reproducible values across eight wells of the 6-plex assay. NMIA standard target concentration is 1,060 copies/µl (---). FAM (m), HEX (m), Cy5 (m), Cy5.5 (m), ROX (m), ATTO 590 (m). B, 3-D fluorescence amplitude plots of a 6-plex NMIA standard. C, the concentration calls for the NMIA standard were accurate and precise on the QX600 Droplet Reader, with no greater than 1% difference compared to the NMIA standard concentration and with CV <2.0%. Data were generated on a QX600 Droplet Reader using ddPCR Multiplex Supermix and a Bio-Rad performance qualification test. CV, coefficient of variation; NMIA, National Measurement Institute of Australia.

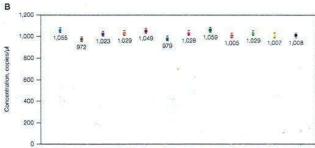
QUANTIFICATION OF 12 TARGETS IN A SINGLE WELL

The QX600 ddPCR System provides unprecedented multiplexing capability for 12 copy number targets in a single well using amplitude multiplexing.









Detection of 12 copy number targets in a single well. A, 2-D fluorescence amplitude plots show a single well with 12 targets across six fluorescence channels using amplitude multiplexing; B, concentration plot shows measured concentration of 12 genes (PLAU, CCND1, VCL, REN, BRCA1, KLF8, SORL1, PTEN, RPP30, PIK3CA, ERBB2, and EGFR) for which the expected concentration was 1,000 copies/µl. Data were generated on a QX600 Droplet Reader using ddPCR Multiplex Supermix and ddPCR Copy Number Assays (available at bio-rad.com/digital-assays).



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BIO-RAD LABORATORIES, INC. | 3

WHY BIO-RAD?

Bio-Rad has more than 70 years' experience supporting life science research and biopharma. We are a leader in digital PCR and other technologies. Our innovative products are available as stand-alone solutions or combined into workflows that provide the right answer the first time, every time with minimized downtime.

KEY APPLICATIONS

The QX600 ddPCR System's six-color detection capabilities set a new standard in user friendliness when developing highly multiplexed assays in the following key applications.



Mutation Detection

The QX600 ddPCR System enables six-color mutation detection with ultrasensitive, cost-effective circulating tumor DNA analysis and a rapid turnaround time - unlike nextgeneration sequencing and other digital PCR platforms.



Viral Titer and Vector Identity

The QX600 ddPCR System enables rapid viral vector titer characterization of multiple critical targets like inverted terminal repeat, target gene of interest, control elements, and terminator, all in the same well, saving time and cost.



Wastewater Surveillance

The QX600 ddPCR System can quantify multiple pathogens in wastewater with high precision and sensitivity.

DIGITAL ASSAYS

Bio-Rad has a large menu of off-the-shelf assays, kits, and design services. The digital assays website allows ddPCR users to find and buy assays across a variety of applications. You can search curated lists of predesigned and validated assays, or design and customize your own assay by using one of the assay design engines. Built by ddPCR experts, the design engines customize a ready-to-use assay optimized for Droplet Digital PCR.

Find and buy your ddPCR Assays here.



Parameter	QX600 Droplet Reader	Automated Droplet Generator	QX200 Droplet Generator
Dimensions (W x D x H)	66 x 52 x 29 cm (26 x 20 x 11 in.)	66 x 56 x 66 cm (26 x 22 x 26 in.)	28 x 36 x 13 cm (11 x 14 x 5 in.)
Weight	26 kg (56.6 lb)	45.5 kg (100 lb)	4.5 kg (10 lb)
Capacity	1-96 samples/run	1-96 samples/run	1-8 samples/run
Droplets per 20 µl sample	20,000	20,000	20,000
Detection FAM/EvaGreen®, channels HEX/VIC, Cy5, Cy5.5, ROX, and ATTO 590			
Sample Light-emitting lllumination diodes		=	-
Sample detection	Avalanche photodiodes		

ORDERING INFORMATION

Catalog #	Description

QX600 Droplet Digital PCR Systems

17007769 QX600 Droplet Digital PCR System 17008371 QX600 AutoDG™ Droplet Digital PCR System 12013328 QX600 Droplet Reader

1864002 QX200 Droplet Generator 1864101 **Automated Droplet Generator**

Visit bio-rad.com/QX600 for more information.

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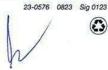
Purchase of Digital PCR and/or Single-Cell NGS Sample Preparation products (the "Products") from Bio-Rad Laboratories is subject to Bio-Rad Laboratories, Inc. Standard Terms and Conditions of Sale, which can be accessed at https://www.bio-rad.com/en-us/ terms-conditions. Unless we expressly state otherwise in additional Terms and Conditions, no rights are granted for you to distribute or resell the Products. Unless we expressly state otherwise in additional Terms and Conditions, no rights are granted for the development or commercialization of diagnostic assays for use with the Products without a license from Bio-Rad. It is the user's obligation to obtain a commercial license from Bio-Rad for (i) all commercial uses (not just diagnostic uses) and (ii) sale of assays for use on Bio-Rad's dPCR and ddSEQ instruments. The Products and/or their use are covered by U.S. and foreign patents and/or pending patent applications owned by or under license to Bio-Rad Laboratories, Inc. See https://www.bio-rad.com/en-us/trademarks.



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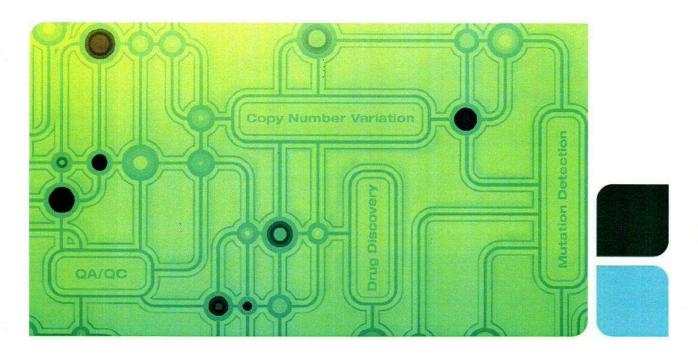
Life Science Group







Droplet Digital PCR: QX200 AutoDG Droplet Digital PCR System



Automated Droplet Generator

In a Complicated World, the Future Just Got Simpler

Bio-Rad's QX200 Droplet Digital PCR (ddPCR) System gives scientists the power to unveil new discoveries through precise and absolute nucleic acid quantification. The Automated Droplet Generator (AutoDG) simplifies the ddPCR workflow, making digital PCR both scalable and practical.

Simplifies the ddPCR Workflow and Minimizes Hands-On Time

- Generates droplets for 96 ddPCR reactions in less than 45 minutes
- Guides setup in less than 5 minutes with large, color touch-screen interface and light-emitting diode (LED) lighting
- Requires no supervision or hands-on activity during droplet generation

Eliminates User-to-User Variability and Offers Flexibility

- More consistent droplet counts across users and plates
- User-definable plate layout with increments of 8 wells
- A single AutoDG can keep multiple QX200 Droplet Readers running
- HEPA-filtered enclosure reduces contamination and allows the system to be placed in a standard laboratory

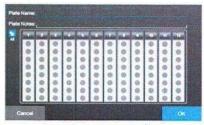












Select columns.



Load consumables and confirm start.



Countdown timer indicates time remaining until the plate is ready.



Timer indicates time elapsed since droplet generation.



Simply Set Up and Go

The Automated Droplet Generator's large, color touch-screen interface guides users to droplet generation in just three easy steps.

- Select desired columns across a 96-well plate
- Load only the consumables you need, as prompted by the system
- Confirm and start the run

A countdown timer will display the time remaining so users can maximize their time in the laboratory. When the plate is ready, users are notified and a time-elapsed counter begins. Every run is stored in an exportable log file for future reference.

Bio-Rad's QX200 AutoDG Droplet Digital PCR System combines workflow simplification with established leadership in absolute quantification.

Ordering Information

Catalog #	Description
1864100	QX200 AutoDG Droplet Digital PCR System, includes Automated Droplet Generator, QX200 Droplet Reader, laptop computer
1864101	Automated Droplet Generator
1864108	DG32 Automated Droplet Generator Cartridges, pkg of 30, enough for 10 x 96-well ddPCR Plates
1864109	DG32 Automated Droplet Generator Cartridges, pkg of 60, enough for 20 x 96-well ddPCR Plates
1864110	Automated Droplet Generation Oil for Probes, 140 ml, enough for 20 x 96-well ddPCR Plates
1864112	Automated Droplet Generation Oil for EvaGreen*, 140 ml, enough for 20 x 96-well ddPCR Plates
1864120	Pipet Tips for AutoDG System, pkg of 20, enough for 10 x 96-well ddPCR Plates
1864121	Pipet Tips for AutoDG System, pkg of 40, enough for 20 x 96-wel ddPCR Plates
1864125	Pipet Tip Waste Bins for AutoDG System, pkg of 10, enough for 10 x 96-well ddPCR Plates

Visit bio-rad.com/AutoDGinfo for more information.

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EvaGreen is a trademark of Biotium, Inc. Bio-Rad Laboratories, Inc. is licensed by Biotium, Inc. to sell reagents containing EvaGreen Dye for use in real-time PCR, for research purposes only.

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Life Science Group

BIO RAD

Website bio-rad.com USA 1 800 424 6723 Australia 61 2 9914 2800 Austria 00 800 00 24 67 23 Beigium 00 800 00 24 67 23 Brazil 4003 0399
Canada 1 905 364 3435 China 86 21 6169,8500 Czech Republic 00 800 00 24 67 23 Denmark 00 800 00 24 67 23 Finland 00 800 00 24 67 23 France 00 800 00 24 67 23 Germany 00 800 00 24 67 23 Hong Kong 852 2789 3300 Hungary 00 800 00 24 67 23 Finland 00 800 00 24 67 23 Brazil 4003 00 00 24 67 23 Japan 81 3 6361 7000 Korea 82 2 3473 4460 Luxembourg 00 800 00 24 67 23 Mexico 52 555 488 7670
The Netherlands 00 800 00 24 67 23 New Zealand 64 9 415 2280 Norway 00 800 00 24 67 23 Portugal 00 800 00 24 67 23 Finland 80 800 00 24 67 23 Singapore 65 6415 3188 South Africa 00 800 02 46 72 359 fin 00 800 00 24 67 23 Sweden 00 800 00 24 67 23
Switzerland 00 800 00 24 67 23 Taiwan 886 2 2578 7189 Thailand 66 2 651 8311 United Arab Emirates 36 1 459 6150 United Kingdom 00 800 00 24 67 23

Q

20-0264



All India Institute Of Medical Sciences

Ansari Nagar, All India Institute of Medical Sciences New Delhi - 110029

KIND ATTENTION **Customer GSTIN No:** The Director

Company's GSTIN No.

07AAATA4049H1ZY

Company's TIN No. Company's PAN No. 07AABCG4572B1ZY 07300252410 AABCG4572B

GENETIX BIOTECH ASIA Ltd.

9/54, Industrial Area Kirti Nagar, New Delhi-110015,INDIA

Website www.genetixbiotech.com E-mail:info@genetixbiotech.com Phone: 011- 4502 7000

Doc No. Date 24-August-2024 Customer No. Valid Date 31-March-2025 Dispatch Through Destination Payment Term Delivery Against Delivery 5-6 Weeks Warranty 2 Years

Place of Supply 07-Delhi

S.					Unit Rate			C	GST	SGST	
No.	Product Code	Product Description	Qty.	UOM	(INR)	Vendor Name	Taxable Value	Rate	Amount	Rate	Amount
1	12013328	QX600 Droplet Reader	1	No	16,155,000. 00	Bio-Rad Laboratories (India) Pvt Ltd	16,155,000.00	CGST@ 9%	1,453,950.00	SGST@ 9%	1,453,950.0 0
		HSN # 27101930 Group - Chemical,Reagent,Kit									
2	1864101	AUTOMATED DROPLET GENERATOR HSN # 27101930 Group - Instruments & Equip.	1	no	0.00	Bio-Rad Laboratories (India) Pvl Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
3	1814000	PX1™ PCR Plate Sealer	1	no	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
		HSN # 90278090 Group - Instruments & Equip.									
4	12015392	PTC Tempo 96DW	1	PACK	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@	0.00
		HSN# 90279090 Group - Chemical,Reagent,Kit				,				100/00	
5	12001925	ddPCR Plates	1	No	0.00	Bio-Rad Laboratories	0.00	CGST@	0.00	SGST@	0.00
3	12001523	96-Well,Semi-Skirted HSN # 39269099 Group - Instruments & Equip.	3	110	0.00	(India) Pvt Ltd	0.00	9%	0.00	9%	0.00
6	1814040	PIERCEABLE FOIL HEAT SEAL	1	PACK	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
		HSN# 76071999 Group - Labware & Miscell.									
7	1864108	DG32 CARTRIDG, QX100/QX20 DG HSN # 90278090	0 2	no	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
		Group - Instruments & Equip.									
8	1864121	PIPET TIPS AUTO DG 4x(10X96) 1	no	0,00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
		Group - 90278090 Instruments & Equip.									
9	1864125	WASTE BIN AUTO DG(QX100/QX200) HSN # 90278090 Group - Instruments & Equip.	1	PACK	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
10	1863004	DROPLET READER OIL,2x1000 ML/B	1	no	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
	2700	HSN # 38249900 Group - Chemical,Reagent,Kit									







All India Institute Of Medical Sciences Ansari Nagar, All India Institute of Medical Sciences New Delhi - 110029 The Director KIND ATTENTION **Customer GSTIN No:** 07AAATA4049H1ZY

Company's GSTIN No. Company's TIN No. Company's PAN No.

07AABCG4572B1ZY 07300252410 AABCG4572B

GENETIX BIOTECH ASIA Ltd.

9/54, Industrial Area Kirti Nagar, New Delhi-110015,INDIA

Website.www.genetixbiotech.com E-mail:info@genetixbiotech.com Phone: 011- 4502 7000

Doc No. 195834 Date 24-August-2024 Customer No. Valid Date 31-March-2025 Dispatch Through Destination Against Delivery 5-6 Weeks Payment Term Delivery 2 Years Warranty

07-Delhi Place of Supply

S.	THE WINDS			Unit Rate			CGST		SGST		
No.	Product Code	Product Description	Qty.	MOU	(INR)	Vendor Name	Taxable Value	Rate	Amount	Rate	Amount
11	1863024	ddPCR™ Supermix for Probes (No dUTP) 5 ml (5 x 1 ml) HSN# 38221990 Group - Chemical,Reagent,Kit	2	no	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 6%	0.00	SGST@ 6%	0.00
12	1863052	2X BUFFER CONTRL KIT, 2x4.5ml HSN# 38220090 Group - Chemical,Reagent,Kit	2	vl	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
13	1864110	AUTO DG OIL PBS (QX100/QX200) HSN # 90278090 Group - Instruments & Equip.	1	no	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
14	1864112	AUTO DG OIL EG (QX200) HSN # 27101930	1	PACKS	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
15	1863038	Group - Chemical,Reagent,Kit DROPLET DIGITAL FAM OQ REAGENT HSN # 38220090 Group - Chemical,Reagent,Kit	4	PACKS	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 6%	0.00	SGST@ 6%	0.00
16	12015304	QX600 COLOR CALIBRATION CARRYOVER K HSN # 38220090 Group - Chemical,Reagent,Kit	1	PK	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 6%	0.00	SGST@ 6%	0.00
17	12017242	QX600 COLOR CAL DYE PLATE KIT HSN # 38220090 Group - Chemical,Reagent,Kit	1	PK	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 6%	0.00	SGST@ 6%	0.00
18	698-3480	PX1 PLATE SEALER Extended Warranty HSN # 9987 Group - Accessories	1	no	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
19	11001698	QX600 READER + AUTODG EXT WAR HSN # 27101930 Group - Chemical,Reagent,Kit	1	No	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00

CIN: U24239DL2001PTC112768

AN ISO 9001:2008 Certified Company.

"No Credit of Special Additional Customs Duty (SAD) is Admissible"

SUBJECT TO DELH JURISDICTION

18-d office: C-88 Ground Floor, Kriti Max, New Delhi-110015, Ph-41424916, 251122146, Fax: 2546737

18-319. Third Floor Wina A. kanara Business Center, Ghathopar (East Mumba): 400915, Telefax-022-25006834, 25903897

1301 Nanay Ind Staze, IV Main A Block Banasiore-560910.Phone 988-65744321, Telefax-022-275733

20, Survey No. 22, 503, Nigyl ProCelorly Napar, Hyckenbe-590092-Phone 8184-62009188 Telefax et 640-40161304, 42024387





All India Institute Of Medical Sciences Ansari Nagar, All India Institute of Medical Sciences New Delhi - 110029 KIND ATTENTION The Director

Customer GSTIN No: Company's GSTIN No. Company's TIN No. Company's PAN No.

07AABCG4572B1ZY 07300252410 AABCG4572B

07AAATA4049H1ZY

Warranty

Doc No. 195834 Date 24-August-2024 Customer No. Valid Date 31-March-2025 Dispatch Through Destination Payment Term Delivery Against Delivery 5-6 Weeks

2 Years

9/54, Industrial Area Kirti Nagar, New Delhi-110015, INDIA

Place of Supply 07-Delhi

GENETIX BIOTECH ASIA Ltd.

Website.www.genetixbiotech.com E-mail:info@genetixbiotech.com Phone- 011- 4502 7000

S.	Product Code	Product Description	Qty	UOM	Unit Rate	Vendor Name	Taxable Value	CGST		SGST	
No.	Fibuuct Code	Froduct Description	Qty	UOW	(INR)			Rate	Amount	Rate	Amount
20	11002062	Extended warranty for PTC Tempo HSN # 9987 Group - Accessories	1	no	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
		71000330110								(4)	
21	1864022	One-Step RT-ddPCR Adv Kit 500	2	PACK	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@	0.00	SGST@ 6%	0.00
		HSN# 38221990 Group - Chemical,Reagent,Kit									
22	12015172	ddPCR Microsatellite Instability Kit HSN # 30021500	1	PACK	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 6%	0.00	SGST@ 6%	0.00
		Group - Chemical,Reagent,Kit									
23	12018108	QX MANAGER PREMIUM EDITION SOFTWARE HSN # 90275090	1	PACK	0.00	Bio-Rad Laboratories (India) Pvt Ltd	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
		Group - Chemical,Reagent,Kit									
24	Desktop	Sutabile Computer	1	No	0.00	Misc	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
		HSN# 84713090 Group - Instruments & Equip.									
25	UPS-3KVA	3 KVA ON LINE UPS	1	No	0.00	Misc	0.00	CGST@ 9%	0.00	SGST@ 9%	0.00
		HSN# 85049090 Group - Chemical,Reagent,Kit								3.6	

Remarks/Special Instructions	Base Value Total	16,155,000.00
*INC Indicate = Including		
*The above quoted price with 2 year warranty.		
*Terms & Condition Enclosed.	INTRA GST TAX	2,907,900.00
*Annexure for Consumables/Accessories Enclosed.		30 98

CIN: U24239DL2001PTC112768

CIR: 1/2/42/39/IL/2001P16-11/2/109
AN ISO 9001:2008 Certified Company.

"No Credit of Special Additional Customs Duty (SAD) is Admissible"
SUBJECT TO DELHI JURISDICTION

rited office: C-88 Ground Floor, Kritt Max. New Delhi-110015, Ph. 41424816, 251122146, Fax: 2546737
8-319. Third Floor Wing A. Kanzar Subinese Center, Glashopar (East) Mumbia: 400075, Telefax-4022-25006834,25003897
8-319. Third Floor Wing A. Kanzar Subinese Center, Glashopar (East) Mumbia: 400075, Telefax-4022-25006834,25003897
8-319. Survey No. 522-250. Vigiply Floor Gelovic Agriculture 600-60574527; Telefax-6022-25006834 indicate et 600-40161304, 42024387



All India Institute Of Medical S	Sciences
Ansari Nagar, All India Institute New Delhi - 110029 IN	of Medical Sciences
KIND ATTENTION	The Director
Customer GSTIN No:	07AAATA4049H1ZY
Company's GSTIN No.	07AABCG4572B1ZY
Company's TIN No.	07300252410
Company's PAN No.	AABCG4572B

GENETIX BIOTECH ASIA Ltd. 9/54, Industrial Area Kirti Nagar, New Delhi-110015,INDIA

Website www.genetixbiotech.com E-mail:info@genetixbiotech.com Phone-011-4502 7000

Place of Supply	07-Delhi	
Warranty	2 Years	
Delivery	5-6 Weeks	
Payment Term	Against Delivery	
Destination		
Dispatch Through		
Valid Date	31-March-2025	
Customer No.		
Date	24-August-2024	
Doc No.	195834	

Remarks/Special Instructions	Base Value Total	16,155,000.00
*INC Indicate = Including		SX 56
*The above quoted price with 2 year warranty.		
*Terms & Condition Enclosed.	INTRA GST TAX	2,907,900.00
*Annexure for Consumables/Accessories Enclosed.		STATE AND SEC.
	Others	
	Grand Total INR	19,062,900.00

Amount (In Words)

INR. One Crore Ninety Lakhs Sixty Two Thousand Nine Hundred rupees only

Purchase Order & Draft in Favour of:-

Genetix Biotech Asia (P) Limited 71/1 First Floor, Najafgarh Road, New Delhi : - 110015 Ph: 011-45027000 (Direct) Ph: 011-45027000 (Board) E-mail:- info@genetixbiotech.com

For Further Assistance:-

Genetix Biolech Asia Pvt Ltd. 71/1 First Floor Shiva Ji Marg New Delhi-110015 Website:www.genetixbiotech.com E-mail:info@genetixbiotech.com Phone- 011- 4502 7000, Fax- 011- 2541



CIN: U24239DL2001PTC112768 CIR: UZ4239DLZUUTFIL-112700
AN ISO 9001:2008 Certified Company.

"No Credit of Special Additional Customs Duty (SAD) is Admissible"
SUBJECT TO DELHI JURISDICTION
rted effice: C-86 Ground Floor, Kriti Naar. New Delhi-110015, Ph. 4-1424516, 251122146, Fax- 2346737
1-319, Third Floor Wing A. Kanara Business Center, Chaltopar (East) Mumbal-40075, Telefax-922-25006834, 25003897
3-319, Survey No.502, 503, Vijayi Puri Colony Kapra, Hyderabd-500062 Phone # 040-20080146 Telefax # 040-40101304, 42024387





