

**Department of Biochemistry
University of Delhi South Campus
Benito Juarez Road, New Delhi 110021**

Quotation Invitation Letter

Date:22/09/2021

Ref. No. – UDSC/BIOCHEMISTRY/Alo/e-procure-

PURCHASE OF REAL-TIME PCR SYSTEM

Name of the equipment: REAL-TIME PCR SYSTEM

Quantity: One

Specifications and Technical Details:

1. The system should be an automated & integrated system for both real-time PCR and post-PCR (end-point) analysis.
2. The system should be 96-well block system with Peltier based heating & cooling.
3. The excitation source should be LED/Laser and the detection system should be simultaneous and scan-free for all wells with CMOS/CCD detection.
4. The system should have 6 excitation and 6 emission filters and come along with fixed (scanning free) optics, ensuring robust data.
5. The system should have temperature range of 5°C – 99.9°C to facilitate all qPCR applications.
6. The temperature accuracy/uniformity should not exceed $\pm 0.5^\circ\text{C}$ of the display temperature.
7. The system should have peak block ramp rate for exceeding $6.5^\circ\text{C}/\text{second}$ or more in both 0.2 and 0.1 ml block.
8. The system should have better than gradient function in veriflex blocks and six veriflex temperature zone for running six different samples with different annealing temperature simultaneously for different time interval.
9. System should support reaction volume minimum of 10 – 100 μl in 0.2ml tube and have more than 5 color multiplexing without passive reference dye in a single reaction tube.
10. The system should be standalone with 10 GB onboard memory to save the runs and

- have interactive Touch Screen LCD feature.
10. Fast-PCR in less than 40 minutes should be an integral feature of the system.
 11. The system should be able to collect up to 21 unique combinations of wavelengths during a single run for multiplexing on the 96-well block instrument.
 12. System should generate MIQE compliant RDML formatted data along with integrated tools to assist with 21 CFR Part 11 compliance.
 13. The instrument should have software that can analyze multiple perspectives in the Multiple Plots view, with side by side views of all data aspects including the amplification plots, standard curve, multicomponent data plots, and raw data.
 14. The system should come along with software to support applications including absolute quantitation, Relative quantitation, multiplex-PCR, allelic discrimination (SNP), melt curve analysis as well as pathogen detection, plus/minus assay using internal positive control & Melting curve analysis for gene & mutation screening.
 15. The system should give heat map of the amplification & analyzed data. The analysis software should have PCR efficiency factor correction for gene quantification.
 16. The system should be completely open system to support all the Real Time PCR chemistry like TaqMans, SYBR Green, Simple & Hydrolysis Probes, and Molecular Beacons, etc.
 17. The system should detect even 1 copy in a single reaction tube without passive reference dye.
 18. The system should be open system with flexibility to use micro well plates (96-well), 0.1ml individual tubes and 8-tube strips.
 19. System should detect differences in target quantity as small as 1.5-fold in singleplex reactions, and should have 10 logs of linear dynamic range.
 20. The following accessories need to be provided along with the system:
 - (i) cDNA synthesis kit (100 x 20 ul reactions) - 1
 - (ii) SYBR Green supermix with polymerase of high processivity (5 ml) - 1
 - (iii) Clear 96-well skirted PCR plates - 20
 - (iv) Optically ultra-clear 8-cap strips compatible with 96-well skirted PCR plate - 200

General instructions

- Premium branded instrument should be provided to ensure the high quality and reliability of your work.
- The system should be provided with 2 KVA UPS with 30 min backup, branded desktop (Atleast i5 processor with minimum 4GB RAM) for instrument control, operation, data storage, analysis, networking of multiple systems, with USB ports for

- data export with authentic window based software package.
- The quoted system must have full license for PCR process and attach a list of minimum 30 installations is to be provided.
 - A user list of at least 3 users of the equipment quoted (who have installed and used them successfully for years) with addresses / e-mail IDs / phone numbers should also be provided.
 - Details on website & product literature justifying the technical specifications must be provided.
 - The system should come along with 5 years of warranty. Should be supported with remote services, cloud connectivity online monitoring, and external barcode using USB, etc.
 - The supplier should have service center in Delhi/NCR for quick service within 48 to 72 hours
 - Firm MUST provide a compliance statement vis-à-vis specifications in a “tabular form” clearly stating the compliance and giving justification, if any supported by technical literature with clear reference of page number, paragraph or lines. This statement must be signed, with the company seal, by the Tendered for its authenticity and acceptance that any incorrect or ambiguous information found submitted will result in disqualification of the Tender.

Instructions to Suppliers:

Two types of quotations are to be submitted: **Technical** and **Financial**.

Technical Quotations should contain all details of technical specifications of the equipment including manufacture and model details along with commercial terms and conditions, warranty and delivery schedule. The quote should be valid for a minimum of 120 days from the due date. Pictures of the equipment must be included with similar specifications as above with logo or name of the company on them. Authorization certificates from the Principal manufacturer, if any, must be provided. Proprietary certificate for any proprietary or patented item must be provided. Unique features may be highlighted along with their applications and advantages over other available accessories.

Financial Quotations should contain the price of the equipment, discount if any, packaging and forwarding charges, Air Freight and insurance charges, custom duty and clearance as well as transportation charges to the site of delivery/installation. The price quoted should be F.O.R. destination in INR (UDSC).

Payment will be made against successful delivery and after confirmation that the item is intact and functional.

The customs duty exemption certificates will be provided by the buyer and inclusive of the standard installation. The vendor should upload the quotations through e-procure site.


No Commitment to Accept Lowest or any Tender:-

- Demonstration of the item or its use will be required, if needed.
- Institute reserves the right to order equipment/accessories with better quality and

suitability over lower price and to accept or reject any or all quotations without assigning reasons thereof.

- University of Delhi shall be under no obligation to accept the lowest or any other offer received in response to this tender notice and shall be entitled to reject any or all offers. University of Delhi will not be obliged to meet and have discussions with any vendor, and orto hear any representations.


22/9/2021
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