

**Department of Genetics
University of Delhi South Campus
New Delhi - 110021**

Specification of Nucleic Acid Extraction System (DNA Extraction System)

Ref. no. UDSC/Genetics/AD/Nucleic Acid/F/2025-26

Dated 27.05.2025

Quotations are invited through GeM/CPP portal (e-procurement) under 2-bid system for Nucleic Acid Extraction System (DNA Extraction System) with FOR destination price to be quoted in INR for University of Delhi, South Campus. The quote should be inclusive of all taxes and duties for supplying and installation of the item as described below

1. The System should automate extraction of nucleic acids from a wide variety of sample types, system should have factory validated protocols in the systems
2. The Instrument should use magnetic particle technology, should combine the speed, efficiency, and purity of silica-based nucleic acid purification, with convenient handling of magnetic particles
 - A) Fully walk-away automation 14 preparations with flexibility in input and output volumes, Run time:- 20 Min with minimum number of sample of 1 per batch
 - B) Proven, Self-contained sealed reagent strip chemistries should be provided in the kit
3. System should offer extraction within a filtered tip, minimizing or eliminating cross contamination, critical for DNA handling in molecular biology labs
4. System should offer different pre validated kits for efficient extraction of nucleic acids from wide range of samples
5. The system should provide protocol flexibility for the user to keep the sample substrate in the sample tube during extraction, eliminating an extra transfer step or filtration step, especially for samples with background
6. The system should offer an integrated UV lamp to aid in the avoidance of contamination to the robotic work deck
7. System should be provided with proprietary protocol for using the suitable kit for DNA extraction from forensic samples and circulating nucleic acid extraction from liquid biopsy samples
8. System should offer the ability to track run data including reagent and sample data.
9. System should offer sample tracking capabilities throughout the purification via an integrated bar code reader connected to the instrument. Data collected should include sample and reagent information.

10. The system should offer protocols which enable to elute the DNA directly into the final storage 1.5 mL screw-cap tube, eliminating an extra transfer step by the end user
11. Protocol recovery feature: - System should restart the process of the workflow from the step where system was interrupted by manual error or power failure
12. The instrument/kit should allow the end user to select to elute the DNA with either water or low TE buffer, both of which are contained in the reagent strip
13. The Instrument should have external, peer reviewed published data showing the ability to address different applications of DNA analysis with factory Validation Report and certificates and should have at least 5-10 Installations in government or private labs across the India, Vendor should provide installation list and performance letter for the system
17. The proprietary and unique self-contained, sealed Reagent Cartridge Strips should offer:
 - A. Safety – no contact or dispensing of reagents,
 - B. Ease of Use – reagent stripes are easily loaded into the instrument,
 - C. Time Savings – loading of reagent strips and samples takes less than 4 minutes
 - D. Total sample preparation time: - 5 Min.

General Instructions

1. Premium branded instrument should be provided to ensure the high quality and reliability of experimental outcomes.
2. Details on website & product literature justifying the technical specifications must be provided. The vendor must provide appropriate link/ website detail to verify the technical specifications mentioned in the provided product broacher.
3. The system should come along with 3 years of warranty. Should be supported with remote services, cloud connectivity online monitoring, and external barcode using USB, etc.
4. The supplier should have service center in Delhi/NCR for quick service within 48 to 72 hours
5. 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.

Important information

1. The quotation should be addressed to the “Professor Amit Dutt, Department of Genetics, University of Delhi South Campus, New Delhi-110021”. The quote should be

submitted with all terms and conditions and necessary documents latest by end of tender date.

2. Quotations must be submitted in a two-bid-system. The first part, technical bid, should consist of all technical details and supporting documents with terms and conditions. The compliance sheet must be filled by the vender.
3. The second part, financial bid, should contain item-wise pricing of items mentioned in the technical bid. Both the quotation documents/ bids are to be submitted through GeM/CPP portal of the Government of India only (e-procurement). Hard copies of bid will not be accepted.
4. The successful bidder must provide a performance bank guarantee (PBG) as per rule 171 GFR 2017 totaling 3% of the value of the main machine quote with a validity of 60 days upon completion of the warranty period. The PBG should be in favor of **"The Director, University of Delhi South Campus, New Delh-110021"**. PBG must be provided at the time of Installation to avoid delay in payment release.
5. The bidder will have to quote all items together. Partial quotes will not be accepted. For each item, the make, model and technical specifications and quantity must be mentioned clearly. Original brochure must be provided.
6. The purchase committee reserve the right to request the participating vender for demonstration of the all the quoted technical specification/ capabilities of the offered model preferably at University of Delhi South Campus, New Delhi-21, or within the Delhi state. The purchase committee reserves the right to disqualify a participating vender if they fail to demonstrate the quoted technical specification and/or capability of the offered equipment/ model.
7. The quote should be valid for 90 days from the last date of submission of bid.



Professor Amit Dutt
Principal Investigator

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Principal Investigator
ICMR-Centre for Advanced Research
Shodhvik- A liquid Biopsy Facility
Department of Genetics
University of Delhi South Campus
New Delhi-110021