



# राष्ट्रीय पादप जीनोम अनुसंधान संस्थान

(जैव प्रौद्योगिकी विभाग, विज्ञान एवं प्रौद्योगिकी मंत्रालय, भारत सरकार का स्वायत्त अनुसंधान संस्थान)

## NATIONAL INSTITUTE OF PLANT GENOME RESEARCH

(An Autonomous Institution of the Department of Biotechnology, Ministry of Science and Technology, Government of India)

अरुणा आसफ अली मार्ग, पो. बाक्स नं. 10531, नई दिल्ली-110067  
Aruna Asaf Ali Marg, Post Box Number 10531, New Delhi-110067

संख्या: 8/2015-16/रा.पा.जी.अनु.सं./एस एण्ड पी

दिनांक: 17/8/2015

विषय / Subject: मुहरबंद कोटेशन का निमंत्रण / Invitation of Sealed Quotations

Sealed Tenders are invited on behalf of Director, NIPGR from the Original Equipment Manufacturer or their authorized dealers for the purchase **01 no. of Real Time PCR Machine** for the laboratory of our Institute, as per the following specifications:.

### Technical Specifications

1. Peltier based real-time PCR machine with integrated post-real-time PCR analysis. The machine must have temperature range of at least 4 °C to 94 °C (wider than this is also welcome) and must run at universal thermal cycling condition. Temperature fluctuation should not be more than  $\pm 0.5$  °C.
2. Should accommodate both 384 and 96 well blocks in a simple interchangeable manner without use of any tool. Both the blocks must be provided with the machine. All the accessories, if any, required to change, fit and use these blocks must also be provided. As per our convenience, we should be able to use individual tubes, 8 tube strips, 96 well plate or 384 well plate normally available with almost all the vendors.
3. If interchange of 384 and 96 well blocks is tricky and the instrument or its parts are prone to damage due to frequent interchange, suppliers must specify it in their quotation. They should tell us all the precautionary measures. A warranty of at least 3 years on the holders, tools, tubings and connections related to interchange and subsequent functioning of blocks/modules is must.
4. Should be standalone system to avoid dependency on computer for operation. Should be able to store at least 100 reactions in its inbuilt memory.
5. Maximum ramp should at least 6 °C per second. In fast mode, the machine should finish 40 cycles in  $\leq 30$  minutes. The machine should be preconfigured for both fast (40 cycles/30 min) and standard mode (40 cycles/ 2 hrs). Reaction volume can be changed within range of 5 uL to 50 uL.
6. The system should be sensitive enough to detect even 1.5 fold changes in the reactions. In absolute term, even 1 copy should be detected. We should be able to perform multiplexity of at least 5. So, the machine should come with at least 5 filters each for excitation and emission enabling five colour detection systems as per choice of dyes.
7. The machine should utilize a broad spectrum light source (like tungsten-halogen or xenon lamp) for excitation and CCD or PMT for detection. It should come with 5 years warranty on the source of excitation.
8. The machine should be able to detect all the real-time PCR chemistries available. There should be flexibility for passive reference dye.
9. The real-time PCR system should support various applications like quantitative and qualitative gene expression analysis, miRNA profiling, SNP genotyping, copy number variation, high resolution melt, pathogen detection, protein thermal shift and others. Multi-license software for these analyses should be provided. Softwares for Ct distribution, scatter plots, heat maps, standard curve, comparative Ct for relative quantitation, standard curve for allelic discrimination, dissociation curve and protein thermal shift are must. Full version software for primer and probe design and development and guidelines for quantitative and qualitative real-time assays must be provided.
10. The supplier must mention details of protein thermal shift assay and data analysis separately. The software has to be supplied and demonstrated. License, if required, for the same must be provided at least for 5 years.



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11. Should be supplied with dedicated laptop (branded, intel core i5 or latest, windows 7 professional 64-bit, memory 8 GB in 2 slots, HDD 1TB, Intel graphics of latest generation compatible with advanced real-time PCR applications softwares, 4 USB ports for both versions 3.0 and 2.0, loaded with MS office, loaded with softwares mentioned in section 8 for real-time PCR applications) for data analysis. The laptop should have an option for physical lock to avoid its misplacement/theft and should be supplied with the same. The laptop should be supplied with all the cables and accessories required to connect and operate it with real-time PCR machine.
12. Should be supplied with suitable online UPS with minimum 30 min backup for both real-time PCR machine and laptop.
13. All the cables, attachments and other accessories required for complete function of the real-time PCR machine and laptop must be provided.
14. Machine operation/demonstration and wet lab application training should be provided at our institute. Wet lab application training must cover protein thermal shift assay and data analysis. Supplier should come with the required reagents for demonstration.
15. Supplier should provide start-up and practice kits/consumables.
16. The supplier should give at least three years warranty.

You are therefore requested to please send your offer in **two bid system** indicating the maximum discount offered, installation charges along with a copy of authorization certificate, issued by the Principals/OEM. The quotations must accompany a Demand Draft amounting to ₹ 40,000/- (Rupees Forty Thousand only), being the EMD in the name of Director, NIPGR, New Delhi and must be sent in a **Scaled Envelope** duly super-scribed on top of envelope as "**Quotation for Real Time PCR Machine**" so as to reach to the undersigned latest by **07/9/2015 (3:00 PM)**, the same shall be opened on same day at **3.30 PM**.

धन्यवाद,

(कय एवं भण्डार अधिकारी)



## Annexure – I

### नियम और शर्तें:

1. Every tender shall be accompanied with the tender cost of ₹ 500/- (Rupees Five Hundred only) in the form of Demand Draft drawn in favor of “**Director, NIPGR**” payable at New Delhi in separate sealed envelope along with the tender. In case the tender cost is not submitted, the tender will not be considered.
2. Every tender shall be accompanied with the required Earnest Money Deposit in the form of Demand Draft drawn in favour of the “**Director, NIPGR**” payable at New Delhi. Any tender not accompanied by such earnest money will be rejected straight away.
3. The rates quoted in the tender shall remain valid for a period **180** days from the date of issue of Award Letter / Letter of Acceptance of Tender. No tenderer can withdraw/or modify his tender or revoke the same within the said period. If a tenderer on his own withdraws or revokes the tender or revises or alters or modifies the tender for any item or condition within the period mentioned in the tender notice, his earnest money deposit shall stand forfeited. Notwithstanding foregoing, the Institute reserves the right to take other actions as deemed appropriate.
4. NIPGR does not bind itself to accept the lowest or any tender and reserves the right to reject any or all tenders without assigning any reason.
5. NIPGR will not pay any expense, whatsoever incurred by tenderer for the preparation and submission of tenders.
6. The notice inviting tender, will form part of the contract agreement to be executed by the successful tenderer with the NIPGR.
7. All the correspondence on the tender shall be addressed to the Director, NIPGR, Aruna Asaf Ali Marg, New Delhi and any communication addressed to anyone else shall not in any manner to be binding upon the NIPGR, Aruna Asaf Ali Marg, New Delhi.
8. The tenderer shall submit a copy of PAN/TIN numbers allotted to them.
9. NIPGR reserves the right to change the quantities of the units while issuing the letter of award of work.
10. The successful tenderer shall be required to deposit an amount equal to 10% of the Tender value as Performance Security after adjusting the Earnest Money Deposit within 10 days from the date of issue of award letter. Performance Security may be deposited in the form of Demand Draft or Bank Guarantee from State Bank of India Or any Scheduled bank. Incase of violation of any condition of Tender, the Security Deposit / BG will be forfeited / revoked.
11. The rates shall be inclusive of Transportation, loading, unloading, taxes etc., nothing extra will be paid.
12. The supplier should be responsible for any damage and site clearance and nothing extra shall be paid.

(कय एवं भण्डार अधिकारी)