



**DEPARTMENT OF BIOTECHNOLOGY**  
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Dr. D. KARUNAGARAN

Professor and Head

Date: 02.07.2015

**Ref: BT/SMAH/2015/010/SPL**

**Dt. 02.07.15**

**Due Dt.16.07.15**

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
6. **Local Firms:** Quotations should be for free delivery to this Institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.
7. **Firms outside Chennai:** Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Godown, Packing, forwarding and freight charges must be indicated.
8. The rates of Sales/General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. **The taxes leviable should take into consideration that we are entitled to have concessionary sales tax applicable to non-government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.**
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

## **REAL-TIME PCR**

### **SPECIFICATIONS**

1. It should be an integrated system for both Real-Time PCR & post-PCR (end-Point) analysis.
2. It should be possible to use computer for system control, operation and analysis.
3. Sample capacity (wells) : 96
4. Reaction volume : 10-100 µl
5. Excitation source : LED
6. Optical detection : minimum 6 filters
7. Excitation/detection range : 450–680 nm / 500–730 nm
8. Multiplexing : up to 6 targets
9. Heating/cooling method : Peltier
10. Temperature zone function : 6 zones or gradient
11. Temperature Range : 4°C - 99°C
12. Max block ramp rate: 6.0°C/sec
13. Temperature accuracy: bellow 0.3°C
14. Passive reference dyes: Any calibrated dye preferably ROX should be used as Optional use of passive reference dye for normalization.
15. Sensitivity: should detect differences as small as 1.5-fold in target quantities in singleplex reaction
16. Data: The instrument software provides raw fluorescent data and multicomponent (segregated by dye type) data for troubleshooting of experiment.

17. Application: It should cover the following applications

- Absolute quantification
- Relative quantification
- High resolution Melt curve.
- Allelic discrimination/SNP (Single Nucleotide Polymorphism) detection
- Plus/minus assays that utilize internal positive controls

18. Training, service and application support: The vendor should have a good service and application support back up to provide an effective application related troubleshooting and support.

19. Warranty: 2 years

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**Head of the Department**