



KERALA UNIVERSITY OF FISHERIES & OCEAN STUDIES
കേരള ഫിഷറീസ്-സമുദ്രപഠന സർവ്വകലാശാല

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GA7/682/2023

Panangad dated 02.2023

e- TENDER NOTICE

E- tenders are invited for the Supply of **Real Time PCR** for PMMSY Aquatic Referral Lab, KUFOS, Panangad.

The Tender should be submitted as e- tender in the e- procurement portal of Kerala Government with detailed specification, Tender fee of Rs.2000/- and EMD of Rs.10,000/-, by means of e- Payment. The GST amount of the tender fee @18% should be remitted to the GST department directly by the bidder. More details will be available in the Office of Dr. Devika Pillai, PI, PMMSY Project on Referral Lab, KUFOS Panangad, on all working days with the permission of undersigned. As per DSIR registration, necessary exemption can be availed for customs & excise duties for the purchase. Our GST Regn. No. is: 32AAAGK003IQ1ZL

All the terms and conditions applicable to University/Government quotations/Tenders are applicable to this Tender also. Right to accept the Tender in full or in part or to reject without assigning any reason is reserved to the undersigned.

REGISTRAR

To : Firms/ Programmer to publish on the website

Copy to: Dean FFS/ Dr. Devika Pillai, PI, PMMSY Project through Dean FFS

Real Time PCR Specification.

- Real time PCR with block of 96 x 0.2 ml tubes or plate to run typical 0.2ml tubes, strips, and plates. .
- Peltier Based Cooling & Heating for uniform temp control
- The base thermal cycler should be able to be used for standard PCR also
- Should have fast scan mode in which the Scanning can be completed fast and a Typical Gene Expression experiment can be done in 40-60 minutes.
- System should have Gradient Block with uniform ramping with a linear gradient with 8 or more different annealing temperatures or more with a programmable range of 1-24 Degree Celsius,
- Detection of 5 or more different fluorescent reporters in the same tube.-Multiplexing without any addition of any passive reference dye
- Should be capable of Detecting Cy5, FAM/Sybr Green, VIC/JOE, TAMRA/Cy3, Texas Red, Quasar705
- Maximum Ramping speed : 5 °C per sec or more





- Excitation -Emission range: 450- 730nm
- LED Excitation Source with Photodiode/CCD/CMOS as detection source or better
- The Instrument should have Calibration free optics to reduce maintenance cost.
- Six excitation and Six emission channels Each filter should correspond to one dye that ensures smooth differentiation of even dyes having high degree of spectral overlap.
- Dynamic range of 10 orders or more
- Open system capable of running various chemistries so that Different chemistries using TaqMan, Molecular Beacon, SYBR green etc all can be performed.
- Instrument should be a complete open platform for Plastic wares and Reagents
- Temperature range 0- 100 °C with accuracy of ± 0.2 °C and uniformity of ± 0.4 °C within 10 sec of arrival at 90 °C
- Automatic allelic discrimination by end point fluorescence or threshold cycle.
- Gene expression analysis by relative quantity (ΔCt) or normalized expression ($\Delta\Delta Ct$).
- End point analysis for upto 5 fluorophores or more
- Should have mode for Melt curve analysis
- Should be Licensed for Research
- Should be able to quickly set up multivariate experiments with both technical replicates and biological groups
- Should be able to identify reference gene stability and select ideal reference genes
- Should automatically calculate Cq values and reaction efficiency
- Should be able to analyse multiplate studies.
- Analysis Software should be compatible with Windows 10 or higher as well as Mac
- System should be compliant with the MIQE Guidelines
- Should come with startup consumables like cDNA Synthesis Kit , SYBR Green Supermix , Plates, Sealers, Tubes & Strips.
- Should have service support based in Kerala from manufacturer for the quoted model , support document to be submitted.
- Should provide Laptop
- Should come with 3 year warranty