सीएसआईआर-केंद्रीय खाद्य प्रौद्योगिक अनुसंधान संस्थान
CSIR- CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE
मैसूरु / MYSURU-570 020, भारत / INDIA
(Constituent Laboratory of CSIR, New Delhi (Ministry of Science & Technology)
An ISO 9001:2008, ISO 14001:2004 & ISO 17025:2005, NABL Accredited Laboratory

Corrigendum: Tender for Multimode Microplate Reader

Corrigendum Title: Revised Technical Specifications based on PBC

Tender Ref: CFTRI/52354/24-25 **Date:** 05-12-2024

Tender ID: 2024_CSIR_218000_1

The revised final specifications based on the deliberations in Pre Bid Conference held on 18-12-2024 @ 11.00A.M is uploaded herewith.

All the prospective bidders are requested to take cognizance of the revised specifications and submit their bids accordingly on or before 02.00 p.m. on 30-12-2024.

All other tender terms and conditions of tender remain unaltered.

Stores &Purchase Officer
CSIR-CFTRI, Mysore
Dt. 19-12-2024

Revised Technical Specification based on PBC

Multimode Microplate Reader

1. It should have UV-Vis absorbance, Fluorescence intensity, Time-resolved Fluorescence and Luminescence detection mode.
2. Should Have Xenon Flash lamp as the light source and the detector should be PMT, Photodiode detector.
3. Should be able to read 6, 12, 24, 48, 96,384 well plates
4. Should be able to read Endpoint, kinetic, spectral scanning, well area scanning
5. Temperature control should be enabled for Incubation from ambient +4^{0}C to 65 °C with feature to control Condensation.
6. Linear, orbital and double orbital shaking mode should be there with programmable temperature control.
7. For Fluorescent intensity and time resolved fluorescence the wavelength range should be 250 - 700 nm, with Monochromator bandwidth variable, from 9 nm to 50 nm in 1 nm increments, Dynamic range of 7 decades, Sensitivity to quad monochromator: Fluorescein 2.5 pM (0.25 fmol/well, 384-well plate) – top Fluorescein 4 pM (0.4 fmol/well, 384 wells: 22 seconds) for Fluorescent intensity and Monos: Europium 120 amol/well, 384-well plate for time resolved fluorescence, PMT Detection system and the reading speed of 96 well: 10-30 seconds;384 well: 20-90 seconds.
8. For Luminescence wavelength range should be 300 - 700 nm with dynamic range >6 decades and Sensitivity Monos: 20 amol ATP (flash)
9. For Absorbance the detector should be photodiode detector with Wavelength range 230 - 999 nm, 1 nm increment, monochromator as wavelength selector with bandwidth 4

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nm (230 - 285 nm), 8 nm (>285 nm), Dynamic range of 0 - 4.0 OD and Resolution of 0.0001 OD.

10. It should have automated Pathlength correction feature, the accuracy of ±2 nm for Monochromator wavelength and ±0.2 nm for repeatability, OD accuracy <1% at 2.0 OD, linearity of <1% from 0 to 3.0 OD, repeatability of <0.5% at 2.0 OD, Stray light of 0.03% at 230 nm and Reading speed of 96 wells: 10-30 seconds; 384 wells: 20-90 seconds.
11. The instrument should be equipped with single integrated windows-based, software with lifetime license and free upgrades, for Reader control and data analysis should be supplied with the instrument. The software should be able to analyze the data and perform the calculations.
12. Software must have Quick Read function to enable read the plate without lengthy protocol definition.
13. It should be upgradeable in future to interface with Microplate Stacker and also compatible with Automated CO_2 / O_2 Incubator and Live imaging system (imaging capabilities to perform fluorescence, bright field, colour bright field imaging by only adding objectives viz.4x,10x,20x,40x and 60x)
14. The instrument should be able to upgrade in future in order to include Dual Reagent Dispenser and should support Absorbance, Fluorescence and Luminescence reading modes. It should be Capable to dispense in 6- to 384-well plates, with the volume range of 5 - 1000 µL in 1 nm increment.
15. Micro volume plate (1-3ul sample capacity) with at least 15 samples at a time should be supplied with machine
16. CO_2 and O_2 Control option of 0 – 20% CO_2 control and 1 – 19% O2 control, with optional Gas Controller
17. Should be able to upgrade this instrument in future to enable to perform Fluorescence Polarization / Anisotropy measurements. & Should be able to upgrade this instrument to

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enable to perform Alphascreen / AlphaLISA assays. Should have provision for 680nm Laser light source for performing Alphascreen / AlphaLISA assay. This should be invariably confirmed on the manufacturer's website & product brochure.

18. The Instrument should be equipped with Computer and windows to support all the software to be used for analysis. (The latest desktop with windows 10 /11 operating software, Intel core i7 14th generation processor with minimum 16GB DDR5 RAM, with dedicated NVIDIA graphic card, 1 TB SSD. WiFi / Bluetooth / USB Keyboard / USB Mouse/2 X USB 2.0 / 6 X USB 3.0, LED desktop monitor with 24inch screen size, with FHD resolution with minimum one year manufacturer warranty, The system should be provided with 3KVA UPS back up of 30 mins at full load.
19. Vendor should provide CE/BIS certificates of the quoted reader, and Dust cover for the instrument.
20. Vendor should provide a minimum of 1 year comprehensive warranty from the date of installation and after that, 5 years of AMC post warranty (Rate to be quoted separately).
21. All the spare parts should be available in next 10 years from the date of installation.
22. Software:

    Software should enable the user to understand the system, easy to operate, assist to interpret, analysis and export in the preferred format such as raw data, graphs, tables etc.

    System should have different file formats during data export which includes .xlsx, .pdf, xml, and .txt & should be able to work in latest windows versions

    Free software upgradation facility entire life time of the instrument
23. There should be a provision for demonstration by the qualified technician at site for the supplied system. The supplier shall provide on-site training with regular operation and maintenance of the instrument. Application specialist should provide special training about sample analysis (Data collection, measurements and data analysis, etc.)

24. Basic Consumables: The basic consumables required to initiate experiments should be provided. Cell culture compatible White walled transparent bottom, Black walled transparent bottom, transparent 96 well plates 1 Box each, cell apoptosis kit – 2 Nos, TR-FRET kit – 1 No.
25. All components and spares of the equipment must be from Original Equipment Manufacturer. The system should have safety compliant regulatory certification.
26. All the operational manual, application manual as well as service manual along with schematic in English are to be provided both as soft copy or hard copy. Test Reports for all the modes of operation to be provided.

K. Alsu
19/12/2024.