Indian Institute of Technology Kanpur
Department of Biological Sciences & Bioengineering

Enquiry No. IITK/BSBE/JGR-5620/2016-17/03
Dated: 27th January, 2017

Enquiry for Microplate Luminometer /Multimode Reader

1. System should have Luminescence, Fluorescence and Visible Absorbance measurement capabilities.
2. System should be capable for performing applications such as – Cell health assay, Cell Signaling and metabolism assays, Reporter gene Assays , Nucleic Acid and Protein Quantitation (fluorescent dye based) , Elisa Assays ,BCA protein Assays ,Bradford Protein Assays , Multiplex Assays (Cell Viability, Cytotoxicity, and Apoptosis Assays).
3. Compatible with third-party automation control. SiLA Compliant.
4. Sample Format : 6, 12,24,48,96 and 384 well plates.
5. Inbuilt Heater with Temperature Range Ambient +5 degc to 45 Deg C.
6. Inbuilt Shaker with linear or orbital shaking patterns.
7. Dual Reagent Injector system with dispense volume range of 5-200ul in 1ul increments, compatible with 6-, 12-, 24-, 48- and 96-well plates.
8. Integrated Tablet/ PC for instrument operation. Wireless connectivity to wireless network, USB Flash drive, microSD card.
9. Data exportable to Excel spreadsheet for data analysis.
10. System should have Preloaded assays Protocol, and provision for creating customized protocols.
11. Integrated Data Analysis Software – Should be able to Label Blank, Known and Unknown Samples, Assign replicates and perform curve fit analysis of data on the instrument.

Luminescence Module:

12. Detector : Top Reading, Head on Photon Counting Multiplier Tube.
13. Detection Limit: $3x10^{-21}$ moles of luciferase for luminoscence assays.
14. Linear Dynamic Range of 9 Logs without the use of filters or manual gain changes.
15. Cross Talk: Less than 3×10^{-5}(white 96 well plate).

Fluorescence Module:

16. Detector: PIN –photo Diode.
17. Light Source: Wavelength Matched LED.
18. Read Position: Top Reading.
19. 5 standard excitation and emission filters :Wavelength included - UV (Ex: 365nm, Em: 415- 445nm);Blue (Ex: 475nm, Em: 500 -550nm);Green (Ex: 525nm, Em: 580- 640nm); Red (Ex: 625nm, Em: 660 -720nm);AFC (Ex: 405nm, Em: 495 - 505nm).
20. One empty position for customizable excitation and emission wavelength.
21. Detection Limit :2fmol Fluorescein /200ul.
22. Linear Dynamic Range : >6 logs.

Visible Absorbance Module

23. Detector: Top-reading, head-on photon counting photomultiplier tube (PMT).
24. Light Source: Xenon flash lamp.
25. Filter Wheel: 5 absorbance filters Wavelengths 405, 450, 490, 560 and 600nm ,10nm bandwidth.

26. Detection Limit 0.1 O.D.
27. Dynamic Range: 0–4.0 O.D. in the 405–600nm spectral range.

Terms & Conditions:

1.Details of the items including relevant accessories with comparative technical specifications should be mentioned.
2. Prices should include delivery up to IIT Kanpur.
3.Comprehensive Warranty should at least be for 3 (three) years after installation.
4.Validity of quotation should be at least for 30 days.
5.Delivery period should be within 4 weeks from the date of purchase order.
6.Technical and financial bids should be sent separately, in sealed covers.
7.Proprietary Certificate should be included, if relevant.
8.Installation and training will have to be done on the site free of charge.
9.Send the detailed quotation along with your authorized dealer certificate to the address, given below Within one week of this advertisement i.e. latest by 3rd February, 2017 (2.00 P.M.)

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