

Annexure-A

No.97-RIMS-Bio-C/E-15

Imphal, the 13th Feb 2017

Specification of Microplate Reader

Technical Specifications:-

- i) Should be a 8 channel Micro plate Reader
- ii) Should be an Open system which allows to program & save minimum of 150 protocols with different Elisa protocols.
- iii) The reader should be CE/IVD certified. The software should have FDA clearance.
- iv) The user interface should be through external PC with minimum programming steps
- v) Instrument should have external printer facility with USB port based printers.
- vi) Instrument should be able to read all types of micro well plates with transparent bottom flat, C-U and V shaped.
- vii) Should be able to read end point and kinetic reaction.
- viii) Should be based on LED based technology for minimal maintenance & long life of light source.
- ix) Operating temperature should be between 15-35°C
- x) Photometric range should be between 0 to 4,000 OD
- xi) Instrument should have a spectral range between 400-750nm
- xii) Instrument should have both single and dual wave length reading option.
- xiii) Should have minimum resolution of 0.0001 OD means reading should be displayed with minimum of 3 decimal points for accurate quantitative measurements.
- xiv) Should have atleast 5 standards filter-405,450,492,550 & 620 nm and should have atleast 3 open positions for future additions.
- xv) Should have in built plate shaking with minimum of 3 speeds and minimum upto 5 minutes
- xvi) Instrument should be able to read one 96 well microplate with in 30 seconds for faster turnaround time.
- xvii) Memory back up option should be available for data management.

Specification of washer

- i) Washer should be CE/FDA approved.
- ii) Washer manifold should be 8 or 12 channel
- iii) Pump used for aspiration and dispensing should be vacuum pump
- iv) Needle height should be adjustable for dispensing and aspiration according to the size of the wells.
- v) Strip mode & plate mode washing both should be present
- vi) Should be able to adapt for U, flat or curved bottoms plates
- vii) Automatic Printing should be done at the registered change of Buffer
- viii) Plate carrier should be autoclavable.



(Prof. Ch. Arun Kumar Singh)

Director

Regional Institute of Medical Sciences,
Imphal