ALL INDIA INSTITUTE OF MEDICAL SCIENCES
ANSARI NAGAR, NEW DELHI-29
STORES SECTION (DO)

Ref. No. 49/Stores(DO)/Biotech/PAC/2019-20/FSC-I Dated-14/02/2020

Sub:- Purchase of "**Automated Liquid Scintillation Counter – 01 No.**" for the Department of **Transplant Immunology & Immunogenetics** at AIIMS, New Delhi-110029, on proprietary basis Inviting comments thereon.

******

The Institute is in the process to purchase "**Automated Liquid Scintillation Counter – 01 No.**" at AIIMS, New Delhi from **M/s. PerkinElmer (Singapore) Pte. Ltd, Singapore.** The PAC Certifications by **M/s. PerkinElmer (Singapore) Pte. Ltd, Singapore** through as well as the user department are attached.

The above documents are being uploaded for open information to submit objections, comments, if any, from any manufacturer regarding proprietary nature of the equipment/item within 15 day from the date of issue/uploading of the notification giving reference No. **49/Stores(DO)/Biotech/PAC/2019-20/FSC.** The comments should be received in office of Stores Officer (FSC), Store Section (DO), Animal House Building, Near Biotechnology Building at AIIMS on or before **06/03/2020upto12.30 p.m.** failing which it will be presumed that any other vendor is having no comment to offer and case will be decided on merits.

Yours faithfully,

15/2/2020
SR. STORES OFFICER (DO)

Encl: Related documents enclosed.

(2)

**Unit-1** **Approx. cost- 35 lakhs**

## Specifications for Automated Liquid Scintillation Counter (on proprietary basis)

The system should perform liquid scintillation counting, reporter gene assay, metabolic studies, GPCR assays, cell proliferation & cytotoxicity study and wipe tests etc.

The system should have following components:

1) Automated LSC should be capable of counting 2 or more samples simultaneous in a plate & two or more vials when reading samples in vials
2) Should count from the top of the plate and from both top and bottom in coincidence allowing gamma, beta, and luminescent counting in a wide variety of plate and tube formats. Should be able to count both in coincidence mode (for increase in counting efficiency by several hundred percent in Scintillation Proximity Assays) and Time Resolved –Liquid Scintillation Counting (TR-LSC) mode for best efficiency in filter plates as well as opaque microplates.
3) Should have a stacker/sample changer for at least 5 microplates & 50 vials of 4ml or more volume.
4) Instrument should be able to switch from one protocol to another automatically without any user intervention for unattended operation.
5) Should compensate for both optical and isotopic crosstalk allowing use of a wide range of micro plates when counting higher energy beta and gamma emitters
6) Performance data for Liquid scintillation counting with test plate should be performed with unquenched sample.
   **Counting efficiency**:
   3H -equal to or more than 55%,
   14C- equal to or more than 92%
7). List of at least 5 installations of the same model in the country is to be provided

**Other general specifications:**

1. The machine should be a computer-controlled system and suitable PC needs to be quoted with latest configuration at least 23 inch LED monitor,10th generation i7 processor, 16GB RAM and minimum of 2 TB Hard drive (should include at least 500 GB SSD drive) with online UPS (1KVA) with minimum half an hour backup. The system should also be provided with a monochrome LaserJet printer.
2. The machine should be CE (Europe)/UL /EMC/CSA certified.
3. Acquisition and Analysis Software should come with the system - to have data acquisition, analysis and management capabilities.
4. Software should be upgradable Free of cost during the lifetime of the instrument. In case updated software /new software, the upgraded version of the software should be compatible with the PC configuration or the PC should also be upgraded as per the software.
5. Power supply of the instrument should be compatible with Indian Electrical supply (230v/50Hz). Also the equipment should be provided with appropriate SERVO voltage stabilizer.

**Other Requirements:**

1. To provide onsite training in various application as required for a minimum period of 3 years.
2. Biannual preventive maintenance should be provided.
3. Vendor should submit an undertaking from manufacturer to take the responsibility of maintenance in case of merger or acquisition.
4. Warranty: 5 years comprehensive warranty
5. 5 years CMC (6th-10th year) after completion of the warranty period with spares and labor.
6. Spares parts:

a) The separate price list of all spares and accessories (Including minor) required for maintenance and repairs in future after warranty period must be attached/enclosed along with the sealed quotation without which this quotation will not be considered.
b) Spares/accessories /consumables quoted should be supplied free of cost during warranty & CMAC period.
b) Performance Bank guarantee for 10% of the total cost shall be submitted by the successful bidder valid till the warranty period.

8. Penalty clause as per standard.
a. During the Guarantee period, the instrument should be able to provide 95% uptime efficiency of 365 days (24 hrs). If downtime is more than 5%, the Institute shall be entitled to impose penalty equal to amount of 1% of the total cost of the equipment per day for the first seven days will be payable by the vendor which will doubled on subsequent weeks along with extension of guarantee period by the excess down time period. The vendor must undertake to supply all spares for optimal upkeep of the equipment for at least Five Years after handing over the unit to the Institute. If accessories/other attachment of the system are procured from the third party, then the vendor must produce cost of accessory/other attachment and the CAMC from the third party separately along with the main offer and the third party will have to sign the CAMC with the Institute if required.
b. The principals or other agents are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.
7. Only Principal Companies or Authorized Distributors from Principal companies should quote. Quotations from non - authorized distributors will not be entertained. Features in the quotations should be substantiated with proper Principal Company Catalogue.
8. Copies of all certifications e.g. Quality Standard certificate, Proprietary Item/parts, Patent of parts/ technology, Principal company/Authorized Distributorship should be attached with the quotations.
9. In-House service Engineers from principal company/ or authorized agents should be available in India on 24-hour notice basis in case of emergency (this will apply for that equipment wherein this clause is not built into the specification).
10. Compliant points should be given (in the sheet) in order of the specifications' serial order. Compliant points should be highlighted in the company catalogue with page number.
11. Catalogue and user list of equivalent system operational at Govt. Institution/reputed private institutions to be provided with telephone numbers and email addresses. Should have quality and performance certification from end users (recent; preferable within 2 years).
12. The tender should be floated in 2-bid system.
13. In the technical bid, certificate from the manufactures to give guarantee that in case authorized agent is changed from the time of purchase, uninterrupted service will be provided by the new agency whosoever is now authorized to represent the original manufacturer failing which their bids are liable to be rejected.

(1)

## Justification (2)

The Department of Biotechnology, AIIMS wish to procure liquid scintillation counter MicroBeta2 plate reader with 2-detector system on propriety basis because of the following unique features:

1. The equipment is designed with Unique plurality of detectors consisting of two photomultiplier tubes (PMT) for simultaneous counting of more than one samples together. One is located below the sample, the other above the sample. These count the samples simultaneously, in coincidence, which allows the best possible counting geometry, superior counting efficiency and the most efficient reduction of background. This also enables equipment to count samples in both vials and plates. This feature allows to perform both large and small volume assays by the same instrument. The equipment has ParaLux count mode for scintillation proximity assays fully utilizing the advantage of twin photomultiplier tubes, thereby increasing Counting efficiency by up to 500%.

2. The ultra-sensitive, high dynamic range Asymmetric Quench Parameter AQP(I) of the instrument provides superior disintegrations per minute (DPM) calculations.

3. The Equipment have Time-Resolved Liquid Scintillation Counting (TR-LSC) mode improving counting capabilities significantly with even opaque plates and low energy isotopes.

(5)

Perkin
*For the Better*

PerkinElmer Singapore Pte Ltd
2 Tukang Innovation Grove #04-01
JTC MedTech Hub @ MedTech Park
Singapore 618305
Phone 65 – 6779 9555 Fax 65 – 6872 6595
www.perkinelmer.com

Proprietary Certificate (3)

To whom so ever it may concern

This is to certify that MicroBeta² two detector plate reading LSC instrument and Filtermate Cell Harvester are proprietary products of PerkinElmer and no other company manufactures the same.

The MicroBeta² System provides advanced radiometric and luminescent detection abilities for GPCRs, kinases, reporter gene assays, and traditional liquid scintillation counting. Providing coincidence counting, a unique patented configuration with two photomultiplier tubes that simultaneously detect signal, the Microbeta² System ensures high efficiency and extremely low background for a variety of radionuclides.

Yours Faithfully,
PerkinElmer (Singapore) Pte. Ltd

Authorized Signatory

डॉ. एस.एस. चौहान/Dr. S.S. Chauhan
आचार्य एवं अध्यक्ष/Professor & Head
जैव प्रौद्योगिकी विभाग
Dept. of Biotechnology
अ. भा. आ. सं., अंसारी नगर, नई दिल्ली-29
A.I.I.M.S., Ansari Nagar, New Delhi-29

(5) Authorization letter

(9)

PerkinElmer Singapore Pte Ltd
2 Tukang Innovation Grove
#04-01 JTC MedTech Hub @
MedTech Park
Singapore 618305
Co Reg.No. 199707113D

Phone 65 – 6868 1688
Fax 65 – 6872 6595
www.perkinelmer.com

*3 May 2019*

To Whom It May Concern

This is to certify that PerkinElmer (India) Pvt. Ltd., incorporated on April 16, 2004 and having its registered office at the address mentioned below :

PerkinElmer (India) Pvt. Ltd.
8th Floor , G Corp Tech Park ,
Ghodbunder Road , Kasarvadavli
Thane (West) – 400 615 India

Is a wholly owned subsidiary of PerkinElmer Singapore Pte Ltd.

This certificate is valid for 1 year.

For **PerkinElmer Singapore Pte Ltd**

Daisy AuYeung
Director, Asia Tax and Treasury

डॉ. एस.एस. चौहान/Dr. S.S. Chauhan
आचार्य एवं अध्यक्ष/Professor & Head
जैव प्रौद्योगिकी विभाग
Dept. of Biotechnology
अ. भा. आ. स., अंसारी नगर, नई दिल्ली-29
A.I.I.M.S., Ansari Nagar, New Delhi-29

(54)

# ALL INDIA INSTITUTE OF MEDICAL SCIENCES
## ANSARI NAGAR, NEW DELHI - 110029

Proprietary Article Certificate (PAC) (Machinery & Equipment)

(i) The indented goods are manufacture by M/s. Perkin Elmer

(ii) Item Name: Liquid Scintillation Counter

(iii) Model No: Microbeta plate reader (2 - detector)

(iv) Vital Technical Performance Parameters required which makes the requirement proprietary## ANNEXURE I

(v) No other make or model is acceptable for the following reasons: features mentioned in annexure-I are not available in any other microplate based liquid scintillation counter.

It is certified that market survey has been done and found that no other manufacturer is manufacturing similar/equivalent specifications which can fulfill the vital requirements of end user.

डॉ. भूपेन्द्र कुमार वर्मा
Dr. BHUPENDRA KUMAR VERMA
सहायक आचार्य / Assistant Professor
जैव प्रौद्योगिकी विभाग
Dept. of Biotechnology
अ.भा.आ.सं.अंसारी नगर,नई दिल्ली-29
A.I.I.M.S. Ansari Nagar, New Delhi-29

Signature of TSEC With Name, Designation, Department and Hospital/Institute/Organization

डॉ. एस.एस. चौहान
आचार्य एवं अध्यक्ष/Professor & Head
जैव प्रौद्योगिकी विभाग
Dept. of Biotechnology
अ. भा. आ. सं., अंसारी नगर, नई दिल्ली-29
A.I.I.M.S., Ansari Nagar, New Delhi-29

##Note 1: TSEC should clearly mention the vital functional parameters requirements which end user essentially require and are manufactured by only one manufacturer mentioned in serial no. (i).

# ANNEXURE-I

1. It offers both Co-incidence counting (for increase in counting efficiency by several hundred percent in Scintillation Proximity Assays) and Time Resolved -LSC (mode for best efficiency in filter plates as well as opaque microplates ) in the same instrument.
2. The instrument has a stacker/sample changer for at least 5 microplates & 50 vials of 4ml or more volume
3. It can count from top of the plate and also from both top and bottom in coincidence allowing gamma, beta, and luminescent counting in a wide variety of plate and tube formats.
4. It can switch from one protocol to another automatically without any user intervention for unattended operation.
5. It offers counting efficiency equal to or more than 55% for 3H.

डॉ. भूपेन्द्र कुमार वर्मा
Dr. BHUPENDRA KUMAR VERMA
सहायक आचार्य /Assistant Professor
जैव प्रौद्योगिकी विभाग
Dept. of Biotechnology
अ.भा.आ.सं.अंसारी नगर,नई दिल्ली-29
A.I.I.M.S. Ansari Nagar, New Delhi-29

डॉ. एस.एस. चौहान/Dr. S.S. Chauhan
आचार्य एवं अध्यक्ष/Professor & Head
जैव प्रौद्योगिकी विभाग
Dept. of Biotechnology
अ. भा. आ. सं., अंसारी नगर, नई दिल्ली-29
A.I.I.M.S., Ansari Nagar, New Delhi-29