# Department of Biotechnology, University of Kerala, Kariavattom, Thiruvananthapuram-695581, Ph. No. 0471 2308778

# **Quotation Notice 5**

No. Bio-Tech/Purchase/2021-22/06

Date: 29.11.2021

Competitive Sealed Quotations are invited from the reputed firms /manufacturers / distributors for the supply of Electrophoretic system, Wet transfer blot module, Semi dry Transfer system and Power pack with all relevant specifications. Sealed quotations addressed to The Head, Department of Biotechnology, University of Kerala, Kariavattom campus, Thiruvananthapuram-695 581 should reach on or before 15<sup>th</sup> December 2021, 2.00 pm. The quotation will be opened at 12pm on 16<sup>th</sup> December 2021 at Department of Biotechnology, University of Kerala, Kariavattom Campus.

Technical Specification for Vertical Electrophoretic system with wet transfer blot module, Semi dry Western blot system and Power pack

#### Vertical gel Electrophoresis Unit

- Should be versatile, easy-to-use for fast, simple setup, facilitating rapid sample optimization, method development, and targeted protein analysis
- Should eliminate tiresome assembly procedures and should have a gel caster for leak proof tape free gel casting unit
- Should be able to cast and run 2 gels at one time.
- Thermoplastic casting gaskets seal tightly to ensure leak-free casting
- The system should be compatible for both hand cast gels and readymade precast gels.
- Should have a Side-by-side casting stand allowing access to both gels simultaneously.
- Should have Casting frames with simple cam closure providing precision alignment on any flat surface.

- Gel size (W x L): Precast 8.6 x 6.8 cm; hand cast 8.3 x 7.3 cm
- Glass plate size: Short plate 10.1 x 7.3 cm

Spacer plate - 10.1 x 8.2 cm (with permanently bonded gel spacers)

- Should be provided with min 5 sets of inner and spacer glass plates.
- Combs: Polycarbonate
- Should have sample loading guide for easy loading of the sample.
- A Typical run times for SDS-PAGE should not exceed 45 min (at 200 V constant)
- Should be supplied with SDS PAGE starter Kit, Protein Marker and other necessary consumables.
- Can be used for western blotting with the Transfer-Blot apparatus

#### Transfer blot Module

- Should be suitable for wet electro blotting of proteins.
- should be provide rapid, high quality western transfer
- Gel dimension: 8.5x8 or 7.5 x 10 cm.
- At least 2 blots can be run at one time
- Cooling unit should be there to absorb generated heat during rapid transfer Platinum electrode.
- The unit should be mountable on a Magnetic Stirrer and should also be cold room compatible.
- Buffer requirement should not exceed 450 ml 500ml per run
- Modularity of same tank to run PAGE gels must be available.
- Should be available either as a standalone apparatus or as a module compatible with mini SDS Page Gel running apparatus
- Transfer cassettes & electrodes should be color coded to ensure proper orientation of the gel during transfers.
- The apparatus should come complete with Gel Holder cassettes, foam pads, modular electrode assemblies, cooling unit within Tank, lower buffer tank and lid with power cables.

## Semi Dry Western blot System

- The system should allow fast, efficient, and economical blotting of Proteins and Nucleic acids without a buffer tank or gel cassettes.
- Platinum coated titanium anode and stainless steel cathode plate electrode will be preferred.
- Maximum Gel Size should be 24 cm x 16 cm
- Buffer requirement should not exceed 200ml per run
- The dimension of the apparatus should not be less than 35x24x10
- Should accommodate at least 4 precast gels.
- Transfer should take place within 15 -60 minutes
- Should be compatible to do western, Northern and Southern blot transfers in less time.
- The same system should provide agarose gel support frame for performing southern blotting.

#### Power pack

- Power pack should be intended for protein gel electrophoresis, Nucleic acid gel electrophoresis and blotting techniques.
- Should offer simple programming, timer control, constant voltage, power or current output.
- To prevent damage to electrophoresis cells, the Power Supply should have automatic crossover.
- Power failure detection in timed mod and when power returns run will complete.
- Automatic detection of rapid changes in resistance, rapid voltage change detection and no load conditions.
- Should be compact and stackable.

- Flip-down legs to change viewing angle
- The power pack should have output from 10–500 V, fully adjustable in 1 V steps, 0.01–2.5 A, fully adjustable in 0.001 A steps and 1–500 W, fully adjustable in 1 W steps.
- It should provide constant voltage or constant current or constant power with automatic crossover.
- The power pack should have output terminals with 4 pair recessed banana jacks in parallel.
- It should have timer control to run gels from 1min –99hr, 59 min fully adjustable with anytime power pause and resume option
- It should have LED display of power supply.
- It should have Volt-hour control.
- Should be CE/IVD USA certified or CE European certified.

### **Terms and Conditions**

- Kindly quote the price with 5% GST.
- Bidder should clearly indicate the model number of the offered item. The make and model of the item should be confirmable from the manufacturer's official website.
- Incomplete & conditional quotations and quotations received after the due date will be summarily rejected without assigning any reasons thereof
- Quotation submitted shall remain valid at least for 90 days from the date of opening the quotation
- The price should be inclusive of all taxes, duties, transportation, installation etc. Nothing extra will be paid in addition to the quoted rate
- The Price should be quoted only in Indian Rupees. The quotation shall be typed and signed by the bidder

- Vendors should provide a list of institutes showing installations of such instruments in India with contact numbers.
- Warranty: Maximum warranty has to be given for the item and the supplier shall guarantee to repair/replace the items or its part, if found defective within the warranty period. The entire expenditure for repair/replace the item in this regard shall be borne by the supplier.
- The bidder should clearly specify the availability of after-sales service for the quoted item.
- General rules relating to purchase of materials/equipment will also applicable to this tender
- The undersigned reserves the right to reject or accept the quotation without assigning any reason
- The sealed cover may be superscripted with "Quotation for Supply of Electrophoretic system" at the Department of Biotechnology, Kariavattom."
- The Quotations will be opened at the office of HOD, Department of Biotechnology, University of Kerala, Kariavattom Campus, Thiruvananthapuram on 16.12.2021 at 12.00 pm.

Sd/-Head Department of Biotechnology University of Kerala Thiruvananthapuram