



TENDER NOTICE

NIT – DFY/PROC/02/2022

Date – 13th Jan. 2022

Doctors For You is inviting Tender from Potential Authorised Suppliers for supply of **illumina-Genome Sequencer System, TapeStation & other essential equipments** to be installed & Serviced in at Muzaffarpur & Delhi for below mentioned product specifications.

ProductName - **MiniSeq & NextSeq2000** along with other essential accessories required

Unit Required - Two Units (One MiniSeq & One NextSeq2000)

Product Details - Integrated system for automated generation of DNA clonal clusters by bridge amplification, sequencing, primary and secondary analysis. System includes embedded touchscreen monitor and on- instrument computer, dual surface imaging capability, MiSeq Software Suite, installation kits and standards

Technical Specification for MiniSeq & NextSeq2000 Genomic Sequencing Machine

1. Technical Specifications For Benchtop Next Generation Sequencing System

1. System should occupy minimal lab footprint and should be offered as a single, integrated instrument capable of performing template DNA amplification, sequencing and primary analysis. Prepared libraries should be loaded directly onto the sequencer, and there should be no need of an ancillary system for template amplification.
2. The sequencing chemistry should mimic natural biological chemistry with simultaneous addition of all four bases in the sequencing reaction for competitive addition to the DNA template. The chemistry should thus allow for highly accurate sequencing through homopolymeric regions.
3. The sequencing workflow should allow fully automated, walk-away operation, without user intervention, for template amplification to analyzed data on a single machine, and support unattended operation for at least 300 sequencing cycles.
4. System should use dedicated reagents for generating data of upto 7.5 Gb and 25 million single reads of high-quality data passing filter. The output should be scalable, for data between 1.65 Gb-7.5 Gb, depending on requirements.
5. Sequence output should generate accurate base calls and high error free reads with greater than 80% bases with high quality Q30 score at 2x150 bp read length, derived directly from intensity data and not from a reference sequence-based, multiple-color encoding scheme.

Registration No. F-56886(Mum)

Address: Flat No. 201-203, Building No. 22, Lallubhai Compound, Mankhurd, Mumbai-400043.

Helpline: +91 8261890890

E-mail: info@doctorsforyou.org Website: www.doctorsforyou.org

6. Clonal amplification of DNA template should be fully automated on the sequencer, without the involvement of emulsion PCR.
7. The system should be offered with integrated paired-end fluidics on the instrument, supported with fully automated paired-end chemistry, without user intervention.
8. The sequencer should facilitate the sequencing Amplicon, targeted RNA, small RNA, and targeted gene panel sequencing.
9. The system should have an option of integrating with a cloud based computing environment, for data storage, sharing and analysis.
10. The sequencing chemistry should be robust and globally proven, demonstrated with over 5000 peer reviewed publications.
11. System should offer the user-friendly sequencing experience, such as, intuitive touchscreen user interface, RFID tracking and pre-mixed/pre-filled integrated reagent cartridge for minimal user intervention.

2. Benchtop high throughput NGS system (NextSeq2000) specifications

1. The next-generation sequencing (NGS) system should be a compact benchtop model with minimal foot print and capable of sequencing a 16-40 whole exome sequencing, 2-5 samples for single cell expression (4K cells, 50 K reads per cell) in a single run.
2. Single instrument performs clonal amplification, sequencing, paired-end run and primary data analysis and secondary data analysis, with an inbuilt storage of 3.8 TB and 288 GB memory.
3. The manufacturer should also offer kits and reagents for library preparation from DNA/RNA.
4. System should offer flexible scalability from 40–300 Gb (400M -1 Billion reads) in a single run to support a broad range of applications, including metagenomic sequencing, de-novo sequencing and re-sequencing of microbes, complete de-novo sequencing and re-sequencing of higher eukaryotes including human genome, ChIP sequencing, transcriptome sequencing (microbial, plants and human), etc.
5. The system should have onboard cluster generation, in 13–48 hours, to perform integrated massively parallel sequencing of DNA/RNA libraries loaded directly on the system, through integrated cluster generation (emulsion free) and sequencing by synthesis (SBS) and offers both single end and paired end sequencing (100, 200, 300 cycles).
6. The sequencing technology should offer accurate sequencing of homopolymers and highest read quality score of Q30 for more than 75% of the base calls having >99% accuracy ensuring quality control steps.
7. System should have inbuilt hardware for ultra-rapid secondary analysis for a wide variety of genomic analysis solutions, including BCL conversion, mapping, alignment, sorting, duplicate marking, and variant calling.

8. System should offer On-Board Pipeline for whole exome, targeted resequencing, whole transcriptome expression and fusion detection.
9. System should also offer cloud-computing platform for simplified data management and analytical sequencing tools directly to researchers in a cost effective and user-friendly format.
10. System should be able to sequence multiple samples at a time with option of using barcodes for sample multiplexing (up to 384).
11. The system should include latest software, hardware, accessories and technology available at the time of installation which is needed for generating high quality sequence reads.

	Product Description	Units
1	NextSeq 2000 Sequencing System With 3 Years Warranty Illumina NextSeq 2000 Sequencing System is an integrated system for automated generation of DNA clonal clusters by bridge amplification, sequencing, primary analysis, and secondary analysis. System includes embedded touchscreen monitor and on-instrument computer, control software, hardware accelerated Dragen Bio-IT secondary analysis pipelines, installation and training, and 36 months warranty (including parts and labor)	1
2	HYBEX 220V	2
3	Infinium MIDI Heatblock Insert	2
4	MiniSeq System With 3 Years Warranty Illumina MiniSeq Sequencing System is an integrated system for automated generation of DNA clonal clusters by bridge amplification, sequencing, and analysis. System includes embedded touch screen monitor and on-instrument computer, MiniSeq Control Software, Local Run Manager analysis and management software, installation and training, and 36 months warranty (including parts and labor)	1
5	Covaris M220 Focused- ultrasonicator with 3-year Warranty	2
6	M220 Fill & Drain Accessory Kit	2
7	M220 Swab Cleaning Kit	2
8	M220 NGS 15 to 130 µl micro- TUBE Starter Kit	2
9	Micro volume spectrophotometer (Little Lunatic) with three years warranty	2
10	Vibration Free Table	2
11	TapeStation 4150 system -Agilent	1
12	TapeStateon 4200 system - Agilent	1
13	Refrigerator -80 degree	2
14	Refrigerator -20 degree	2
15	BioShake system with plate adapter	1
16	Qubit Fluorometer	2
17	Tender Format : Storage server: 96 GB RAM, 32 Core Processor, 100 TB Storage	1
18	ThermoMixer C (Eppendorf) Registration No. F-56886(Mum)	2
19	Address: Flat No. 201-203, Building No. 22, Lallubhai Compound, Mankhurd, Mumbai-400043. BSLII A2 type cabinet Helpline: +91 8261890890	1

Annexure I

In the Letter head of the Supplier, kindly furnish the below details.

1	Name of the Authorized Supplier	
2	Manufactured / Maker's Name of the Product	
3	Warranty, Free Servicing Period, Installation and Training (including parts and labor)	
4	Type of Supplier (Proprietorship / Firm / Company etc.)	
5	Address of the Supplier	
7	GST Registration	
8	PAN	
9	Place of the Supplier	
10	Delivery duration	

Interested potential Suppliers are requested to send –

- The application in the tender format provided (Annex- I), along with the product brochures, point by point compliance of the enclosed specifications along with all documentary evidence.
- The financial quotation for the product, installation and training services (including parts and labor), as per the product specification containing Unit price and Delivery charges (extra) **in the letter head of the supplier** (Annex – II).

Last date of Submission of the quotations for the Tender – Thursday, 20th January 2022.

Potential suppliers are requested to send their quotation through e- mail, as per the details provided below. **info@doctorsforyou.org**

**For further enquiry,
Contact - +91- 8473093237**