

ICMR - NATIONAL INSTITUTE OF CANCER PREVENTION AND RESEARCH
PLOT NO. I-7, SECTOR-39, NOIDA-201301

NICPR/STH/ICMRAd-hocproject/NGS/2024-1

Date: 12.07.2024

INVITATION FOR QUOTATION

The National Institute of Cancer Prevention and Research, Noida wishes to invite the rates/quotations for the items mentioned in the attachment.

You are requested to submit your quotation as per the following terms & conditions: -

Terms & Conditions:

1. Quotation for the requisite items (list attached), addressed to the "Director, ICMR-National Institute of Cancer Prevention and Research, I-7, Sector-39, Noida" should be submitted to Stores-In-Charge, Stores Section, NICPR, NOIDA, latest by 22.07.2024.
2. Only sealed quotation will be considered.
3. Kindly mention the subject "STH-16 Samples" & [due date], on the top of envelope.
4. Quotation received after the last date and time or not in attached format is liable to be rejected.
5. Name of items should be provided in format of quotation instead of mentioning "item-1", "item-2", etc.
6. Quoted Items should be readily available with the vendor.
7. Quotation should have a minimum validity of 03 Months.
8. Quotation should have the file reference number as mentioned above.
9. The quotation is to be submitted only in the format enclosed. Not acceptable in any other form.
10. Price should be quoted on the Vender's Letter Head, duly stamped and signed.
11. In the quotation, Sl. No. and name of the items should be same as per the format enclosed.
12. It is mandatory to indicate the GST number in Quotation as well as in the bill for our information.
13. GST will be applicable as per Gol norms to ICMR-NICPR, Noida. Rates may be quoted with GST@5% against the GST/DSIR Certificate.
14. Quotation should be preferably, typewritten and every correction in the quotation should invariably be signed by the bidder, failing which, the quotation is liable to be rejected.
15. The bidder conditions mentioned in the quotation shall not be binding on ICMR-NICPR, Noida.
16. Vendors may be asked to provide sample of goods/reagents/plastic ware/kits for quality/compatibility before accepting the order. In case the goods are not in conformity with the quality, the order shall stand cancelled.
17. Any dispute concerning any Terms and Conditions of the Quotation and/ or the supply of items, will be subject to Delhi Jurisdiction only.

Handwritten signature
12/7/24

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12/7/24

18. Materials should be delivered within **Four Weeks** at ICMR-NICPR, Noida from the date of issue of purchase order. The liquidated charges @ 0.5% per week shall be imposed if supply made after expiry of delivery period subject to maximum 10% of the total value of goods/ contract value.
19. If, in the price structure quoted by a bidder, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly. If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail.
20. If no response received from your firm by the indicated date, it will be presumed that you are not interested in quoting the rates and no further communication will be made in this regard.
21. Director, ICMR-NICPR reserves the right to reject any or all quotations without assigning any reason.



S.O (Store)
For Director

ITEM LIST

S. No.	Name of goods/Services Equipment with general Specification (Attach separate sheet if required) *	No. of Samples
1.	<p>mRNA sequencing with Bioinformatics Analysis</p> <p>Specification: RNA extraction, mRNA Enrichment (Poly A+), stranded RNA Seq library preparation, 2x150 PE sequencing using Illumina Hiseq to generate 25-30 million reads/samples</p> <p>Standard Data Analysis:- Alignment of quality filtered reads onto reference genome, transcript abundance estimation, differential gene expression analysis and identification of statistically significant up/down regulated genes, functional annotation of significant genes (Gene Ontology and Pathway).</p> <p>Deliverables: Total RNA Isolation, QC report, Library preparation and QC report, fast QC file, raw data & analysis report</p>	16

**Technical Specification for mRNA sequencing
including Bioinformatics Analysis**

1. No of sample: 16 (8 samples in duplicate)
2. Technology to be used: NGS (Illumina HiSeq/NovaSeq) platform
3. Application: mRNAsequencing
4. Sample type: Breast cancer cell lines (Humans)
5. Extraction of mRNA from biological samples should be done by vendor. Poly A+ enrichment for mRNA to be prepared as per standard procedure.
6. Leftover mRNA Sample should be returned to ICMR-NICPR, Noida.
7. Duration of samples to be sent for sequencing: As per sample availability
8. Library Type: Stranded RNA Seq library preparation.
9. Library QC should be performed using both fluorimetry and automated gel electrophoresis system. qPCR to be used for measuring the quality and quantity of the library before sequencing.
10. Read Length and Data: Approx. 25-30 million reads in 2x 150 PE sequencing for each sample by using Illumina Hiseq/NovaSeq with Q30>90 percent. The data alignment metrics should be consistent with best practices for mRNA-seq data analysis. Details of parameters

used for alignment and software details, statistics report detailing coverage, orientation of mapped reads and number of unmapped reads should be provided.

11. Vendor must provide workflow of mRNA-seq sample processing and data analysis for technical evaluation. Comparative gene expression data of resistant vs control cell lines will be provided.

12. Bioinformatics analysis should include entire analysis as below:

- i. Primary Statistics report -detailed QC results
- ii. Read statistics reports
- iii. Identification of known mRNAs and discovery of novel mRNAs
- iv. Comparative study of DGEs report among the given samples.
- v. Alignment statistics report
- vi. Gene/Transcript wise expression matrix across all samples
- vii. Target precision of significant mRNAs and Gene/Transcript annotation results (Gene Ontology – GO level distributions of genes covering biological processes, cellular components and molecular analysis & Pathway analysis). Separate target identification for up and down regulated mRNAs.
- viii. DGE reports should be provided including p value for significance and volcano plot
- ix. Heatmap of up and down regulated transcripts and graphical representation of significance value.
- x. RAW data, BAM, SAM and count files should be provided
- xi. Groupwise comparison to understand differential gene expression between control and resistant cell model
- xii. Alternative splicing events and fusion of transcripts needs to be shared

13. Report with methodology, results and references should be provided

14. Vendor should have in-house sequencing facility in India, certified vendors will be considered more competent than others without certifications.

15. Proof of lab facility: Installation and authorisation certificate from the NGS platform manufacturer should be provided. Partner/collaborator company installation certificate located abroad will not be considered.

16. Sample (Cells, RNA etc.) should not be sent out of India. All sample processing and analysis must be done in India.

17. Vendor having previous transcriptomics experience with drug resistant cell lines will be given preference.

18. Data delivery deadline:

Sample mRNA QC report should be submitted within one week after receiving the samples. If not, it will be considered as QC passed and liability for quality and timely delivery of data will lie with the vendor. Raw FastQ file and other quality and parameter file mentioned above should be delivered within 25 days after sample QC is completed. All data analysis with above-mentioned tools should be delivered within maximum 45 days after sample QC check is completed.

19. The details of progress of experiment should be intimated to the customer/ scientist and further processing in case of any issues shall be based on the instructions of the customer only.

20. Data should be delivered through secured server & HDD only. To maintain data confidentiality, firm should not write data in CDs/DVDs.

21. Cost of mRNA sequencing: The cost of mRNA sequencing as approved should be maintained until completion of 16 samples.

22. Failure to submit quotation as per the technical specifications may deprive the concerned firm from consideration.

Financial Bid Format (On Letter Head)

To,
The Director,
ICMR-NICPR, Noida.

Offer for supply of consumable against NICPR inquiry NO. ICMR-NICPR/..... is under:

S. No.	Items	Name of Brand/ Make/ Model	Unit	Qty. Req.	Quoted Brand & Cat No.	Unit Price	Discounted Price	GST Amount	Price to NICPR (v+vi) or (iv+vi)	Net Price (Qty* Price to NICPR) [(i)*(vii)]
			(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
1	mRNA sequencing with Bioinformatics Analysis									
TOTAL PRICE (Including Discount & GST) (INR)										
TOTAL PRICE (in words):										

I/We, the undersigned, hereby declare that:

1. I/We certify that quoted product meets the specification as described in the call for quotation.
2. I/We certify that rate quoted for this product does not exceed the Maximum Retail Price of the product.
3. Items should be readily available with the vendor.

Place:
Date:

Name and Surname:
Signature & Stamp of Bidder