

Government of India  
Bhabha Atomic Research Centre  
Food Technology Division

Ref. FTD/JI/29522/2022

Date: 12/08/2022

JG

**Sub: Invitation of quotation for transcriptome sequencing of control and treated cell lines**

Dear Sir,

Quotations are invited from suitable and eligible bidders for the following work as per following details.

S.No	Name of items	Sample no.
1.	Transcriptome sequencing of control and treated cell lines (technical details enclosed) <b>*As per Technical Specifications</b>	20 No.

**The general terms and conditions for submitting quotations are as follows:**

1. The party shall arrange all materials & components required for the work.
2. The Party should furnish their PAN No. and VAT/Service Tax/S.T.No along with the quotation, otherwise their quotations are liable to be rejected. Moreover, it may please be emphasized that quotation is submitted on printed letter heads.
3. Quotation must reach **Head, Food Technology Division by 30<sup>th</sup> August, 2022 before 16.30 hrs.**
4. The technical and financial bids (superscripted with the above reference number and due date) should be sent in a separate sealed envelope placed in single envelope through speed post only. Financial bid will be opened only if technical bids are found suitable.
5. The address on the envelope should read:  
**Head, Food Technology Division  
Bhabha Atomic Research Centre,  
Trombay, Mumbai – 400085  
Attn: Dr. Sanjeev Kumar**
6. No advance payment in full or in part will be admissible and payments will be made only after completion of the job.
7. The bidder should provide at least three work completion certificate during the current financial year.
8. The offer shall clearly indicate the **time required for completing the entire work, taxes or levy, if any. The offer shall be valid for a minimum period of 4 months from the date of opening the tender.**
9. The bidder shall deliver the service within 4 months from the date of issue of work order to the bidder.
10. The work proposed is meant for research purposes of Research Institution under the Dept. of Atomic Energy, and therefore, the purchaser will make available to the successful bidder with whom a work order is placed the 5% GST exemption certificate duly signed by the authorized officer in the Dept. of Atomic Energy well before the completion of the work. While submitting the offer, the bidders should specify in his offer that he is ready to pay 5% GST on the price quoted by him, subject to production of GST exemption certificate.
11. The acceptance of quotation will rest with **Head, Food Technology Division, BARC**, who does not bind himself to accept the lowest or any quotation and reserves to him the right to reject any or all quotations received without assigning any reason whatsoever.

  
(Dr. Sanjeev Kumar)  
SO/F, FTD

Through:

  
Dr. S. Gautam  
Head, FTD, BARC

डॉ. एस. गोताम / Dr. S. Gautam

अध्यक्ष, खाद्य प्रौद्योगिकी विभाग / Head, Food Technology Division  
जैव-विज्ञान समूह / Bio-Science Group

भाभा परमाणु अनुसंधान केंद्र / Bhabha Atomic Research Centre

भारत सरकार / Government of India

ट्रॉम्बे, मुंबई-400 085 / Trombay, Mumbai-400 085

## **\*Technical Specifications**

### **Transcriptome sequencing\*:**

#### **Technical Specifications:**

1. RNA extraction and Quality control assessment of RNA on Agarose gel and by Agilent bioanalyzer with RIN number.
2. Ribo-Zero treatment should be given to RNA before library preparation.
3. Quality of library should be assessed extensively before sequencing.
4. Library should represent even rare transcripts.
5. RNA Sequencing using Illumina NovaSeq 6000 platform or better platform.
6. Generating at least 25 million paired end reads with minimum 2 x 150 bp read length per sample.
7. At least 90% of reads should have should have QC value > 30.
8. Low quality reads should be excluded from the analysis.
9. Data analysis should include the following
  - Average base content per read
  - GC content distribution of reads
  - Read length distribution
  - Sequence quality score distribution
  - Base quality score distribution
10. Complete analysis that should include detailed differential expression analysis, Statistical analysis, Gene functional annotation, gene coverage depth, pathway analysis, protein-protein interaction analysis.
11. Heat map, Volcano plot, MDS plot etc. for graphical representation should be provided.
12. Support for uploading data in required format in public databases.
13. Total RNA and cDNA should be returned.
14. The bidder should keep the sequence information and other details confidential.
15. Service provider must provide the following information along with data
  - Detailed methodology of RNA extraction, library preparation, platform used and data analysis
  - Summary of the key findings of data
  - Data should be provided in external storage device
  - Authenticity of service should be supported with some data warranty
  - Raw data file must be there with expression intensity file
16. No advance payment will be made for the service.