

Government of India  
Bhabha Atomic Research Centre  
Molecular Biology Division

Ref: MBD/2021/P/20211

December 16, 2021  
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**Sub: Invitation of quotation for transcriptome sequencing and bioinformatics analysis**

1. Technical and financial bids should be sent in two separate envelopes as per the guidelines of two bid tender procedure.
2. Bidder shall quote for the preparation of RNA from bacterial cells and sequencing of RNA. Bacterial cell pellets will be provided.
3. Bacterial cells will be provided to the firm/company under dry ice conditions which will be used by the supplier for RNA extraction, QC, sequencing library preparation and bioinformatics analysis. Details of the work are given in annexure-I.
4. The quotation must include the PAN/TIN/ST No. etc. of the firm/supplier. Taxes and excise duties shall be quoted separately. Necessary tax exemption certificates shall be provided if applicable.
5. The company/firm should collect the samples from Bhabha Atomic Research Centre, Trombay, Mumbai.
6. Both raw and processed data and results of analysis should be provided as soft copy.
7. Bidder shall quote for the fabrication of these components without material supply.
8. **Technical and financial bids should be sent separately in two sealed envelopes by speed post only** and must reach the following address within 15 days from the date of advertisement in a sealed envelope superscribed with "Quotation for transcriptome sequencing and bioinformatics analysis (Attn: Divya T V)" indicating the above reference number and due date.  
The address on the envelope should read:  
The Head,  
Molecular Biology Division  
Bhabha Atomic Research Centre  
Trombay, Mumbai- 400 085
9. The bidder shall deliver the finished components after approval by the appropriate authority, **within six months from the date of final work order** issued to the bidder.
10. The finished components shall be delivered by the bidder at Molecular Biology Division, Mod labs, Bhabha Atomic Research Centre, Trombay, Mumbai 400 085.
11. No advance payment will be made for the service. 100 % payment will be made only after the satisfactory completion of the work for all the samples.
12. Head, MBD, BARC reserves the right to accept/reject any or all the quotations without assigning any reason.

*Divya TV*  
16/12/21  
Divya T V  
SO/D, MBD  
divyatv@barc.gov.in

*Chhvi Arora*

Through,

Head, MBD, BARC

*Hari Sharan Misra*  
16/12/21  
डॉ. हरि शरण मिश्रा / Dr. Hari Sharan Misra  
अध्यक्ष / Head  
आण्विक जैविक प्रभाग / Molecular Biology Division  
भारत सरकार / Government of India  
भाभा परमाणु अनुसंधान केंद्र / Bhabha Atomic Research Centre  
ट्रॉम्बे, मुंबई - ४०० ०८५ / Trombay, Mumbai - 400 085.

## Annexure-I

1. Bacterial cell pellet will be shared with the supplier. The supplier has to pick up the samples from user site (provision of at least 4 times sample pick up should be there and is invoked in case of split samples or if the sample fails the quality control)-bidder must mention the requirement in the quotation.
2. No. of samples: 18
3. All the methods/kits followed should be disclosed by the company at the time of submitting the quotations.
4. Preparation and quality control assessment of total RNA from *Chryseobacterium* PMSZPI and *Anabaena* PCC 7120 followed by ribodepletion. Library QC to be determined for the quality and quantity of the library before sequencing
5. RNA Sequencing using Illumina HiSeq 2500 platform or better.
6. Generating a minimum of 10M paired end reads counts per sample.
7. At least 90 % reads should have QC value (Phred Quality Scores) >30, Low quality reads should be excluded from the analysis
8. Bioinformatics data analysis for sequencing. The detailed bioinformatics pipeline including the softwares used should be mentioned in the quote:
  - Raw reads FASTQ files, Quality control of raw reads. Primary Statistics report - QA/QC results
  - Assembly statistics, Mapping: Alignment of reads to the specified reference genome
  - Identification of antisense transcripts
  - Differential gene expression with list of up regulated and down regulated genes.
  - Statistical analysis: Differential Gene Expression Reports across different conditions using Heatmap generation of up and down regulated transcripts.
  - Volcano plot for graphical representation.
  - Gene Functional annotation, gene pathway annotation and analysis
  - Support for uploading data in required format in public databases
  - Data should be maintained on the server for at least 3 months after the project completion.
8. Vendor should own in-house sequencing facility in India. Illumina installation certificate in India should be provided, partner/collaborator company installation certificate located abroad will not be considered.
9. Quotation should be on firm's letter head with GST Number, PAN Number and CST Number mentioned clearly.
10. All the quotations will be evaluated based on the technical competence and past experience in the similar projects by the bidding companies. Each technically suitable offer will be evaluated by the indenter by audio and video conferencing, if needed.
11. Data should be delivered through secured server & HDD only. To maintain data confidentiality, firm should not write data in CDs/DVDs. Both raw and processed data and results of analysis should be provided as soft copy.
12. Time line to complete the project with complete analysis (including bioinformatics part) should be written clearly and should not exceed more than 6 months.
13. The details of progress of experiment will be intimated to the customer/scientist and further processing in case of any issues will be based on the instructions of the customer only.
14. Failure to submit quotation as per the technical specification will deprive the concerned firm from consideration. Bidders must clearly mention all the above technical specification, terms and conditions in the quotation, failing which the quotation will be rejected.
15. DAE-BARC reserves the right to disqualify any bidder without certifying any reason.
16. Submission of a point by point compliance sheet mentioning bidder's specifications against all the specifications mentioned in the tender document is mandatory, failing which the quotation will be rejected.