

भा0कृ0अनु0प0-केन्द्रीय भैंस अनुसंधान संस्थान
सिरसा रोड़, हिसार-125001(हरियाणा)
फोन न0 01662-281611

क्रमांक: 3-62 / सी0पी0एस0 / 2017-18 / III

दिनांक: 07 जून, 2017

सेवा में,

Sub: - Next Generation Sequencing - reg.

Dear Sir,

On behalf of Secretary, ICAR, Director CIRB, Hisar invites your lowest quotation for Next Generation Sequencing as per details given below:

S. N.	Name of the item with Specification	Qty.	EMD	Rate quoted by firm in Rs.)
1.	<p>Next Generation Sequencing Specifications for Whole Transcriptome Sequencing using RNA-Seq (Next Gen Sequencing) for blood samples</p> <ul style="list-style-type: none"> ➤ Whole Transcriptome Profiling using RNA-Seq (NGS) ➤ High quality total RNA isolation from blood ➤ RNA Quality Check for quality check of extracted RNA by bioanalyzer/Tapestation, Qubit, Nano/Picodrop and agarose gel electrophoresis/other methods. ➤ Sequencing on Illumina HiSeq 2500 (High-Output Mode)/3000/4000 System ➤ mRNA library preparation using Illumina protocol and QC and validation of the prepared library ➤ Deep sequencing has to be carried out with maximum read length of 2 x 100 to 150 bp paired end sequencing protocol ➤ A total of not less than 25-80 million reads should be generated per run and have standard data yield of the specified sequencing system used. ➤ The analysis pipeline should be provided and should include minimally the <ul style="list-style-type: none"> ❖ Raw data QC for filtering of reads with high quality bases, raw and filtered data statistics and distribution graphs ❖ Transcriptome assembly report and mapping of QC filtered reads to reference genome (<u>using each of Bowtie, TOPHAT, Cufflinks and Trinity separately</u>) ❖ The report should provide the differential expression analysis of clustered transcripts and expression profiling results 	06 Nos	10000.00	

	<p>between the samples and sample groups including the categorization as miRNA, mRNA, lncRNA or any other as well as distribution of Up and Down regulated transcripts. The analysis should give report based on <u>each of CUFFDIFF and DESeq both.</u></p> <ul style="list-style-type: none"> ❖ Gene ontology analysis and pathway analysis by <u>DAVID Functional annotation, KEGG pathway mapping, WEGO plots and PANTHER tools.</u> ❖ <u>SAMtools analysis</u> for reporting of SNPs & indels and SNPs curation by <u>ClinEff/ SnpEff and SnpSift.</u> ❖ <u>For each analysis, the raw data used/ input in the analysis softwares should be provided.</u> ❖ Analysis report containing complete methodology from sample QC to data analysis with all the tables, figures & result including the <u>Volcanoplot, Heatmaps, MA-Plot, MD-Plot</u> should be provided 			
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Note: The last date of receipt of quotation is **28.06.2017 up to 2.30 P.M.** The quotation may either be sent by post or dropped in the Quotation box placed in the room of Administrative Officer of this Institute. This Institute will not be responsible for any postal delay:

1. (a) The rates should be quoted in Indian Rupees on FOR Destination basis indicating separately prices, packing, forwarding, Freight and insurance extra in clear terms.
(b) The unit price should be for the same units as indicated above/in the list enclosed.
(c) Quantity discount, if any should be indicated prominently.
(d) Offers on firm price basis will only be accepted.
2. Rates of sales tax should be mentioned both under Central and State Tax Act/Rules should be specifically indicated. NO FORM 'C' or 'D' WILL BE ISSUED BY THIS INSTITUTE. Manufacturer's name, their trade mark, brand and model if any, should invariably be mentioned in the quotation. Illustrated leaflets giving technical particulars operation manual etc. should be send along with the quotation to facilitate consideration of offer. The rates quoted should be valid for **60 days** from the date of opening of quotation and the delivery period should be **4 weeks** from the date of issue of supply order.
3. There should be no cutting /overwriting. The cutting, if any, should be duly attested Un-attested amended/ overwritten figures will not be considered. In all matter of disputes, the decision of the Director of this Institute shall be final and binding on the tenderer.
4. Minimum period of delivery of the stores/materials should be specified in the quotation.
5. Quantity of each item/sample to be purchased may vary according to actual requirement of this Institute at the time of placing order/work order.
6. Payment will be made within reasonable time say **30 days** after receipts of material/servicing in good condition and submission of bill at this Institute.
7. Quotation should be sent in a sealed cover indicating the words. "**Quotation for Next Generation Sequencing**" File No.3-62/CPS/17-18/Vol.III with last date for receipt **28.06.2017 at 2.30 P.M.** and will be opened on same date i.e. **28.06.2017 at 3.00 pm.** Quotation received in an unsealed cover or received after due date and those ambiguous are liable to be rejected.
8. This Institute reserves the right to reject any or all quotation (s) received without assigning any reasons thereof.
9. Quotation should be addressed to the Director, CIRB, Hisar


Administrative Officer