ALL INDIA INSTITUTE OF MEDICAL SCIENCES
ANSARI NAGAR, NEW DELHI-29.
STORES SECTION (DO)

Ref. No. 02/Stores (DO)/TII/PAC/2017-18/FSC **Dated 27.07.2017**

Sub:- Purchase of Quant Studio R5 (Real Time PCR System) for the department of TII, (AIIMS), New Delhi-110 029, on proprietary basis **Inviting comments thereon.**

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The Institute is in the process to purchase **Quant Studio R5 (Real Time PCR System)** for the department of TII, (AIIMS), New Delhi from M/s. Invitrogen BioServices India Pvt. Ltd., Bangalore through M/s.Vision Diagnostic India Pvt. Ltd., New Delhi. The proposal submitted by M/s. Vision Diagnostic India Pvt. Ltd. and PAC Certifications are attached.

The above documents are being uploaded for open information to submit objections, comments, if any, from any manufacturer regarding proprietary nature of the equipment/item within issue of 15 days giving reference No. **02/Stores (DO)/TII/PAC/2017-18/FSC.** The comments should be received by office of Sr. Stores Officer (DO), Store Section (DO), Animal House Building, Near Biotechnology Building at AIIMS on or before 12.08.2017 upto 12.30 p.m., failing which it will be presumed that any other vendor is having no comment to offer and case will be decided on merits.

Yours faithfully,

27.7.17

SR. STORES OFFICER (DO)

Encl: Related documents enclosed.

Proprietary Article Certificate for procuring the goods from a single source under the provision of sub Rule 154(iii)

(i) The indented goods are manufactured by **M/s. Applied Biosystems (now a subsidiary of M/s. ThermoFisher Scientific, USA)** (Model: QUANTSTUDIO5)

(ii) No other make or model is acceptable for the following reasons:

The department requires a Real-Time PCR system with the following capabilities:

1. **The system should be a standalone system with large touch screen LCD to avoid dependency on computer for operation with 10.0GB or more onboard memory for storing data.**
2. **The system should be an automated integrated system for both real-time PCR and post-PCR (end-point) analysis using in-built multiple Peltier and should support the temperature range from 4°C to 100°C.**
3. **The system should have 6 or more independent temperature zone to allow running multiple experiments simultaneously.**
4. **The system should be able to run multiple samples with five or more specific annealing temperature in a single run.**
5. **The system should have a ramp rate of atleast 6.0°C/sec or better, to allow for run-time of 30 minutes or less.**
6. **System should have a linear dynamic range of min. 10 logs and should have the capability to detect as little as 1.5-fold differences in target quantity.**
7. **The system should be able to analyze 96 samples simultaneously in any of the following formats: 96-well plate with optical adhesive cover, 96-well plate with optical flat caps, 8-tube strips and individual tubes.**
8. **The system should have bright white LED / other advanced spectrum light source and should combine 6 or more decoupled excitation and emission filter sets having excitation / detection range 450–680 nm/500–730 nm, to enable collection of 20 or more unique combinations of dyes allowing for a broader range of detection chemistries and assay multiplexing.**
9. **The software should utilize a multi-component algorithm to provide solutions for multiple dye signals, to enable the simultaneous detection of multiple fluorophores with reduced cross-talk for greater accuracy.**
10. **System should support various real-time quantitative PCR applications, including gene expression analysis, using relative standard curve, comparative Ct (ΔΔCt) for relative quantitation, standard curve for absolute quantitation allelic discrimination (SNP), dissociation curve analysis, pathogen detection, multi-plate with multiplex capability for gene expression/ genotyping study.**
11. **System should be supplied with a 2.0KVA (or suitable) Online UPS with three hours backup.**

Point no. 6 & 8 are proprietary to one manufacturer and are not available in any other system.

03.03.17

(iii) Concurrence of finance wing to the proposal vide:.....

(iv) Approval of the competent authority vide:.....

17.01.17

(Signature with date and designation
Of the procuring officer)

Dr. Partha Pratim Chattopadhyay, MD, PhD
Professor
Department of Biochemistry
All India Institute of Medical Sciences
New Delhi-110 029, INDIA

VISION
(An ISO 9001:2008 Certified Co.)

Ref: vdipl/2016-17/1965

Dated: 20/12/2016

PERFORMA INVOICE

To
The HOD
Department of Transplant Immunology
& Immunogenetics A.I.I.M.S
New Delhi-110029

Subject:- Quotation for Quant Studio 5 System.

Kind Attn:- Dr. Uma Kanga

Dear Sir/Madam,

As per your requirement of Quant Studio5 System, we are pleased to offer you our best lowest prices for your kind consideration. Our quoted Product is from "Life Technologies" Part of Thermo Fisher Scientific, USA.

Molecular Diagnostics Simplified

S.No	Description	Qty	Unit Price (INR)	Total Price (INR)
1	**Quant Studio 5 –System with Notebook Computer** The Applied Biosystems® QuantStudio® 5 Real-Time PCR System is designed for users who need superior performance, maximum dye versatility, and security options in a real-time PCR system that is affordable and easy to use. The optimized Design and Analysis software is ideal for both first-time and experienced users. Sample capacity (wells) Qualitative, post-PCR detection for automated allelic discrimination (SNP genotyping) assays and presence/absence (plus/minus) assays that use internal positive controls. *Chemistry Capabilities : Fast/Standard *Features to assist with 21 CFR Part 11 * Number of copies: 1 copy *Sensitivity: Detect differences as small as 1.5-fold in target quantities in singleplex reaction **Part Number: A28569**	1	39,95,000.00	39,95,000.00
2	RNASE P 96-WELL INSTR VERIF PLATE **Part Number:** 4432382	1	Included	Included
3	KIT-TAQMAN 18S STARTER KIT EACH **Part Number:** 4352407	1	Included	Included
4	96-well 0.2mL Background/ROI Plate	1	Included	Included

Vision Diagnostic (India) Pvt. Ltd.

Corporate office:
FFSR 9A, First Floor, Ansal Premium Corporate Suite, Ansal Plaza, Sector-1, Ghaziabad-201010, UP, India
Tel.:+91-120-43430 00 to 21(22 Lines)
info@vision-groups.com
www.vision-groups.com

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Tel.:+91-11-2279 3914, 4805 4332,
Fax.: +91-11- 2279 3914,

Mumbai
Shop No. 19, Emerald Apts., Parsi Panchayat Road, Andheri (East) Mumbai 400 069
mumbai@vision-groups.com

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03.03.17

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(iv) Approval of the competent authority vide:.....

14.01.17

(Signature with date and designation
Of the procuring officer)

Dr. Partha Pratim Chattopadhyay, MD, PhD
Professor
Department of Biochemistry
All India Institute of Medical Sciences
New Delhi-110 029, INDIA

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(An ISO 9001:2008 Certified Co.)

Ref: vdipl/2016-17/1965

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3	KIT-TAQMAN 18S STARTER KIT EACH **Part Number:** 4352407	1	**Included**	**Included**
4	96-well 0.2mL Background/ROI Plate	1	**Included**	**Included**

Vision Diagnostic (India) Pvt. Ltd.

Corporate office:
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Andheri (East) Mumbai 400 069
mumbai@vision-groups.com

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Part Number: 4432364		
	Sub Total	39,95,000.00
	Special Institutional Discount @ 25%	9,98,750.00
	Total Price after Discount	**29,96,250.00**

Rs. Twenty nine lakhs ninety six thousand two hundred and fifty only.

Note:

1. 2 KVA online UPS is included in above offer from local source.

TERMS & CONDITIONS:

- CDEC Certificate will be required at the time of clearance.
- Quoted prices are bonded warehouse prices no taxes applicable.
- Prices quoted are valid until 31st March 2017.
- Prices given are for only the configuration/model/part code referred to above.
- Payment Terms: Net 30 Days after successful installation against I Note.
- Delivery: Delivery will be made within 6-10 weeks after receipt of confirmed order.
- Comprehensive Warranty: 5 Years from the date of INSTALLATION.

- CMC Charges:- As per the price negotiations meeting CMC charges after expiry of 5 Years Warranty Period will be 6% of equipment's cost and 10% increase every year.

Please note that Service Tax (Actual) will be charged extra on the above – mentioned CMC charges.

Thanking You,
Yours Faithfully,

For VISION DIAGNOSTIC (I) PVT. LTD.

AUTHORISED SIGNATORY

Molecular Diagnostics Simplified

Vision Diagnostic (India) Pvt. Ltd.

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ThermoFisher SCIENTIFIC
The world leader in serving science

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TO WHOM-SO-EVER IT MAY CONCERN

This is to certify that **QuantStudio 5 Real-Time PCR System** having the **Part Number A28567(0.1 ml block) & A28574(0.2ml block)** and comes under **Patent No. WO 2016127128 A1& WO 2016127124 A3** (publications contain claims that are not issued claims and may change greatly before they are issued) manufactured brand **Applied Biosystems (part ThermoFisher Scientific)** is the **proprietary item** and has following unique features:

1. The QuantStudio® 5 real Time PCR system has the VeriFlex™ Technology.This technology involves Multiples separate heating/cooling elements below each of the multiple segmented metal blocks. VeriFlex technology allows for a true linear temperature slope across metal blocks with the ability to set up to 6 different temperatures. The user can set each temperature zone uniquely, allowing for better control of temperature optimization
2. The QuantStudio® 5 real Time PCR system has the OptiFlex technology, OptiFlex system which combines 6excitation and 6 emission filter sets to enable collection of upto 21 unique combinations of wavelength during a single run for multiplexing. With true six color
3. The QuantStudio® 5 real Time PCR system has ThermoFisher cloud, which allow users to access and securely share result with colleague anywhere, anytime from any location with internet access.
4. The QuantStudio® 5 real Time PCR has on-board storage capability with memory capacity of 10GB for storing between 1000-5000 standard absolute quantification run files and is designed for maximum run protection in case of network or power outage .
5. The QuantStudio® 5 Real-Time PCR has best in class ramp rate which 6.5 °C/Sec enabling less 30min run time

For Invitrogen BioServices India Pvt. Ltd.

Authorized Signatory

PHOTOCOPY ATTESTED

S.K. GUPTA
Advocate
Notary Public
Ghaziabad

09 DEC 2016

Registered Office :
Invitrogen BioServices India Pvt. Ltd
2nd Floor, First Technology Place, 3 EPIP Whitefield, Bangalore 560 066
T+91 80 41785401, 41785400, F+ 91 80 41680430, 41259423
www.thermofisher.com CIN: U73100KA2004PTC035330

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QuantStudio 5 Real-Time PCR System

Applied Biosystems has been innovating real-time PCR for over 20yrs and Leveraging Applied Biosystems® engineering and best-in-class industrial design, QuantStudio® 5 System are the latest additions to our family of QuantStudio® systems. QuantStudio® 5 Systems allow maximum efficiency with a high level of performance for multiple applications, including genotyping, miRNA and gene expression analysis, copy number determination, strain identification, presence/absence detection, and melt curve analysis

The QuantStudio 5 systems allow maximum efficiency with a high level of performance for multiple applications, including genotyping range of applications including genotyping, miRNA and gene expression analysis, presence/absence detection, strain identification, and melt curve analysis. The instruments permit multiplex experiments for all of these applications.

Life Technologies is the sole manufacturer and vendor of the QuantStudio® 5 Real-Time PCR System (Part Numbers A28138, A28139, A28140, A28568, A28569, A28570, A28573, A28574, A28575).

At the core of QuantStudio 5 systems are Applied Biosystems™ VeriFlex™ and OptiFlex™ technologies, Remote Accesss & Cloud Connectivity and Highly sensitivity

VeriFlex™ Technology: - VeriFlex™ Blocks provide independent temperature zones for precise temperature control over your qPCR optimization. This technology involves Multiples separate heating/cooling elements below each of the multiple segmented metal blocks. Each pair of heating/ cooling elements and segmented metal blocks are completely insulated from each other to help prevent heat interactions. As a consequence, VeriFlex technology allows for a true linear temperature slope across metal blocks with the ability to set up to 6 different temperatures. The user can set each temperature zone uniquely, allowing for better control of temperature optimization

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OptiFlex™ technologies: - OptiFlex technology provides enhanced fluorescence detection enabling accurate and sensitive data analysis. OptiFlex system which combines 6 excitation and 6 emission filter sets to enable collection of upto 21 unique combinations of wavelength during a single run for multiplexing. With true six color multiplexing capability White-light LED optics system enables powerful, extremely accurate and sensitive data collection

Remote Access & Cloud Connectivity : - Enabled by Thermo Fisher Cloud which allow user to easily access and securely share results with colleagues anywhere, anytime from any location with internet access.

High Sensitivity: - The QuantStudio®5 systems provide sensitive detection and high confidence target discrimination down to 1.5-fold differences in singleplex reactions and obtain 10 logs of linear dynamic range.

Advance Touch Screen: - The QuantStudio® 5 Real-Time PCR has the latest advancements in touch screen usability, allowing to Pause a real-time PCR in progress. The user can choose the temperature the block should remain at during the run pause. During the pause the user can open/close the block drawer to access samples. The user can resume the run from the point at which it was paused from the touch screen.

MIQE guideline support: - The instrument software allows users to save predefined analysis settings for auto-exporting run data into their format of choice, including **RDML** (real-time data mark-up language, compliant with MIQE guidelines) export format

Fast Ramp Rate: - The QuantStudio® 5 Real-Time PCR has best in class ramp rate which 6.5 °C/Sec enabling less 30min run time

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Methods and systems for biological instrument calibration

WO 2016127124 A3

Publication number	WO2016127124 A3
Publication type	Application
Application number	PCT/US2016/016882
Publication date	Aug 28, 2016
Filing date	Feb 8, 2016
Priority date	Feb 6, 2015
Also published as	US20160231246, WO2016127124A2
Inventors	Yong Chu, Jeffrey Marks, Jacob Fraudenthal, Thomas Wessel, David Woo
Applicant	Life Technologies Corporation
Export Citation	BiBTeX, EndNote, RefMan

Patent Citations (2), Non-Patent Citations (2), Classifications (10), Legal Events (1)

External Links: Patentscope, Espacenet

ABSTRACT

In one exemplary embodiment, a method (100) for calibrating an instrument is provided. The instrument includes an optical system capable of imaging florescence emission from a plurality of reaction sites. The method includes performing a region-of-interest (ROI) calibration (102) to determine reaction site positions in an image. The method further includes performing a pure dye calibration (108) to determine the contribution of a fluorescent dye used in each reaction site by comparing a raw spectrum of the fluorescent dye to a pure spectrum calibration data of the fluorescent dye. The method further includes performing an instrument normalization calibration (110) to determine a filter normalization factor. The method includes performing an RNase P validation (112) to validate the instrument is capable of distinguishing between two different quantities of sample.

DESCRIPTION available in

CLAIMS available in

PATENT CITATIONS

Cited Patent	Filing date	Publication date	Applicant	Title
WO2014153369A1 *	Mar 18, 2014	Sep 25, 2014	Life Technologies Corporation	Methods and systems for analyzing biological reaction systems
US20070100569 *	Aug 31, 2006	May 3, 2007	Applera Corporation, Applied Biosystems Group	Method of Automated Calibration and Diagnosis of Laboratory Instruments

* Cited by examiner

NON-PATENT CITATIONS

	Reference
1 *	"Applied Biosystems 7500/7500 Fast Real-Time PCR System Genotyping Experiments Getting Started Guide", 2010, XP055271378, Retrieved from the Internet <URL:https://www3.appliedbiosystems.com/cms/groups/mcb_support/documents/generaldocuments/cms_050334.pdf> [retrieved on 20160510]
2 *	BEN SOWERS: "Thermal Cycler Spectral Calibration Instructions", 15 May 2014 (2014-05-15), pages 1 - 22, XP055271308, Retrieved from the Internet <URL:https://biosearchassets.blob.core.windows.net/assets/BTI_Spectral_Calibration_Instructions.pdf> [retrieved on 20160510]

* Cited by examiner

CLASSIFICATIONS

International Classification	G01N21/27, G01N21/64, C12Q1/68
Cooperative Classification	G01N2021/6471, G01N2333/922, G01N21/278, G01N21/6452, G01N21/6428, G01N2201/13, G01N21/6456, C12Q1/6851, G01N2021/6439, G01N21/274, C12Q1/6851, G01N2201/127

LEGAL EVENTS

Date	Code	Event	Description
Sep 28, 2016	121	Ep: the epo has been informed by wipo that ep was designated in this application	Ref document number: 16705012 Country of ref document: EP Kind code of ref document: A2