

Centre for Stem Cell & Tissue Engineering and Excellence in Biomedical Sciences (Pharmaceutical Extension Block – 2nd Floor) Panjab University, Chandigarh – 160 014

Ref. No. :1573/A /STE

Dated: 5.11.2014

TENDER NOTICE

Sealed tenders are invited from the manufactures/authorized dealers for the supply of **Real Time PCR and Cell analyzer** (equipment) for the Centre for Stem Cell & Tissue Engineering, Panjab University, Chandigarh.

Tenders documents containing detailed information, terms and conditions of the tenders may be downloaded from the University website:http:/tenders. Puchd.ac.in to submitted along with a demand draft of Rs.1000/- and earnest money in favour of the Registrar, Panjab University, Chandigarh.and total amount 2% EMD in favour of the Coordinator of Centre for Stem Cell & Tissue Engineering, The last date for receiving tenders is up to 04:00 p.m. on November 10.2014 late/Incomplete tenders without earnest money will not be accepted. The date and time of opening the tenders is November. 12th 2014 at 11:00 am in the Committee room of the Centre for Stem Cell & Tissue Engineering, Panjab University, Chandigarh.

(Prof. Sanjeev Puri)

Coordinator

1) <u>Real Time PCR System Specifications</u>

 Item
 An integrated system designed to perform Real Time PCR and post PCR end-point analysis.

 The instrument must be license for performing Real Time PCR application.

 The License should be attached .

Applications discrimination	provide	specialized	application	of	absolute	quantitation,	relative	quantitation,	allelic
	/ 9	SNP detection	and plus/mir	nus a	ssays that	utilize internal p	oositive co	ntrols.	
shift.	Sy	/stem should	also be able	to p	erform pro	otein analysis a	oplications	s like protein th	าermal
Excitation Sourc	e	Laser/ LED lig	ht source						
Detection System	m	Photodiode ,	/PMT						
No of color		Minimum fou VIC®/JOE™, N	ir color/four f	filter Ind R	or more (r :OX™)	ninimum suppo	rting dyes	FAM™/SYBR® (Green,
Block Format		Peltier based	96 well block	c forr	nat				
Plastic ware sup	ported	96 well plate,	8 well strips	and	individual	tubes			
Reaction Volum	e	as low as 10u	I						
Dynamic Range	9 order o	of magnitude							

Ramp rate more than 4.5degree c/sec

Temp range	4 - 100 $^{\circ}$ C and temperature accuracy +/- 0.25 $^{\circ}$ C.
maintain	The system should have facility for auto restoration of the precious samples at 4 $^\circ \! C$ to
	Sample integrity soon after the RTPCR process in completed.
, Open system chemistries	The system should be flexible and compatible with other reagents for developing other
	The system should be able to run more than one chemistry in the same run without any
	Calibration or optimization
Gradient facility Assay using	Instrument should be capable for multi-temperature optimization of primer sets or
	independent peltier blocks. System block should give an option to run 4 to 6 separate
six	Temperatures or segment in the same plate to provide temperature zones to run – four to
	different assays with varying annealing temperatures at the same time
Run Time	<40 min
Normalization variations or	The normalization of reaction due to non-PCR related fluctuations such as pipetting
or de-	florescent fluctuations should be possible by using ROX [™] or any calibrated dye. Selection
	selection of passive reference during the run should be optional.
Capability with change	Systems should be easily calibrated with new dyes without any filter or hardware
new dyes	

Installation specification The system should offer a chemical installation kit which offers a 2-fold resolution for a

single

	copy gene. This kit performance should be demonstrated during installation with over 99%
	confidence level.
Software signals, to	Instrument software should utilize a algorithm to provide solution for multiple dye
	Enable the simultaneous detection of multiple fluorophores with reduced cross-talk.
	Also Vendor should supplied below software along with system
	 Primer designing software RQ Software for simultaneously Visualize and analyze unlimited number of 96- well plates of gene expression data HRM software
Consumable support Taqman assays	The necessary consumables to perform real-time quantitative PCR and inventoried
	(MGB probes) and assays for the DNA/small RNA (Custom Assays) templates of our interest
	should be available with same vendor
Service and support Instruments to	The Vendor should have a good service and application support back up along with
provide	provide an effective application related troubleshooting and support .The Vendor should
software	Comprehensive Training on the operation of the instrument, Chemistry options and
	at installation site premises.

Essential accessories

- System should be supplied with branded laptop for data analysis
- Plates & kits for the initial experimentations

- A 2 KVA online UPS with 30 min back up
- Two years warranty from the date of installation

Note: Equipment to be Supplied F.O.R to Centre for Stem Cell & Tissue Engineering, BMS Block2 2nd Floor, Sector-14, Panjab University, Chandigarh

2) Cell Analyzer Specifications

Item	Instrument for the rapid, convenient, quantitative and analyzing the mammalian/microbial cells , fluorescent-based detection of cell health parameters including count & viability, apoptosis and cell cycle
Applications	provide the rapid, convenient, quantitative and fluorescent-based detection of cell health parameters, including count & viability, apoptosis and cell cycle
Optics	Optics — Excitation: Green Laser (532 nm). Variable colours
Data storage and sensitive	computer with 160 GB data storage, provided with Highly intuitive software interface
	touch screen Intuitive and guided menus for generating data output designed for different experimental applications. The output data should be easily accessible and displayed.
	Dedicated software programs and completely optimized software modules for count & viability, apoptosis and cell cycle for complete accuracy and analysis

analysis.	Rapid processing time, Sample format Single loader. Minimum cell volume for all the							
	Suitable for multiple cell types Homogeneous or heterogeneous cells, suspension or adherent. Primary cells or cell lines (stem cells as well)							
Data File Structure								

Output data file formats: In Flow Cytometry Standard (FCS) 3.0 format, EXCEL spread sheets format

Temp range Open system chemistries	As per Laboratory conditions $(4-40^{0}C)$ The system should be flexible and compatible with other reagents for developing other
	The system should be able to run more than one chemistry in the same run without any
50/60	Calibration or optimization. External Power Supply (input voltage range) 100 to 240 VAC,
	Hz 80 W, Fuse Rating Auto-resettable Laser/ LED light source

Capability with	Systems	should	be	easily	calibrated	with	new	dyes	without	any	filter	or	hardware
change													

new dyes

Installation specification The system should offer a demonstrable installation. This kit performance should be demonstrated during installation with over 99% confidence level.

Computer & Software Instrument software should utilize a algorithm to provide solution for all applications All application software must be supplied with the instrument. Easy upgradation for future

applications

Consumable support The necessary consumables to perform application in the cell analyser should be

available with

same vendor

Service and support Instruments to	The Vendor should have a good service and application support back up along with
provide	provide an effective application related troubleshooting and support .The Vendor should
software	Comprehensive Training on the operation of the instrument, Chemistry options and
	at installation site premises.

Essential accessories to be supplied

- System should be supplied with branded laptop for data analysis. Basic kits for the initial experimentations
- A 2 KVA online UPS with atleast 4hrs back up
- Two years warranty from the date of installation

Note: Equipment to be Supplied F.O.R to Centre for Stem Cell & Tissue Engineering, BMS Block2 2nd Floor, Sector-14, Panjab University, Chandigarh