

Ref No: INS/F-6048/2018-2019(Y)

#### Addendum No.1 Ref No: INS/F-6048/2018-2019(Y)

The Following Addendum is issued to our tender, under Ref No: INS/L-6048/2018-2019(Y) for Amending the Specifications and changing the evaluation criteria as below:

# **FOR**

#### **TECHNICAL SPECIFICATIONS:**

### Specifications of High Speed Cell Sorter and Flow Cytometric Analyzer-Qty 01 No

#### High speed cell sorter:

State-of-the-art high speed cell sorter equipped with gas or solid state 405 nm, 488 nm, 561 and 633/635/640 nm lasers. The system should be upgradable on site with more lasers, respective optics and electronics thereof.

The system should be a four-way sorter and supplied with at least a pair of  $50\mu M$ , and  $70\mu M$  (2 Nos), and  $100\mu M$  nozzles. These nozzles should be replaceable by the end-users. The automatic drop delay determination system is required.

The collection device should have temperature controller to maintain the temperature of sorted cells and it should have holders for 96/384 well plates, 1.5ml microfuge tubes, 12 x 75 mm and 15 ml tubes.

The system should have sample mixing and sample temperature control accessories.

The system should be capable of acquiring and sorting at least 50,000 events/second with 98% purity or more.

The system should be capable of detecting at least 14 fluorescence parameters and two scatter parameters. The system should be upgradable up to 18-20 parameters. Fluorescence sensitivity should be high and it is a critical requirement and it should be less than 100 MESF for FITC.

The cell sorter should be equipped with aerosol management system and biosafety cabinet.

The system computer should be supplied with acquisition and analysis software with additional licenses for offline analysis. Latest PC Workstation, 160 GB Hard Drive, DVD/CD-ROM Read/Write Combo Drive, LCD monitor/s and laser based color printer.

The system should be supplied with a standalone flow cytometric analyzer with at least 3 lasers and 8-10 parameters. The system computer of the analyzer should be loaded with FCS express software cable of performing DNA cell cycle analysis with a valid license for at least five years.





#### Flow Cytometric Analyzer

State-of-the-art flow cytometric analyzer should be equipped with solid state 405 nm, 488 nm, 561 and 633/635/640 nm lasers and each laser should have at least 100 mW of power. The system should be upgradable on site with more lasers, respective optics and electronics thereof. Fluorescence sensitivity should be high and it is a critical requirement and it should be less than 100 MESF for FITC. The system should be capable of detecting at least 17 fluorescence parameters and two scatter parameters. The system should be equipped with following dichroic mirrors and emission filters:

No of Detectors	LASER	LASER Power	Dichroic	Band Pass
1			750LP	780/60
2			690LP	710/50
3	105	100 W	635LP	670/30
4	405 nm	n 100 mW	600LP	610 / 20
5			505LP	525 / 50
6			410LP	431/28
7			690LP	710/50
8	400	100 mW	505LP	530 / 30
SSC	488 nm	100 m w	Not required	488 / 10
FSC			Not required	488/10
9	561 nm	561 nm 100 mW	750LP	780 / 60
10			690LP	710 / 50
11			635LP	670/30
12			600 LP	610 / 20
13			Not required	586/15
14			750LP	780 / 60
15	633/635/640 nm	W 001	690LP	710/50
16		100 mW	685LP	695/40
17			650LP	670/30

The system computer should be supplied with acquisition and analysis software with one additional license for offline analysis. Latest PC Workstation, 160 GB Hard Drive, DVD/CD-ROM Read/Write Combo Drive, LCD monitor/s and laser based color printer.

The supplier should provide onsite hands-on training to the flow cytometry facility staff at ncbs.

The supplier should have proven capability in after-sale engineering service and application support in the field of flow cytometry instrumentation in India. The system should have 3 years of warranty.





# **INFORMATION TO TENDERERS**

The Tender shall be evaluated under 2 (Two) Bid System

I Technical Bid

II Financial Bid

# TECHNICAL SPECIFICATIONS & EVALUATION CRITERIA WITH MARKS FOR 2 PART TENDER FOR "High Speed Cell Sorter and Flow Cytometric Analyzer-Qty 01 No".

SI No.	Technical Requirement	Marks
1	State-of-the-art high speed cell sorter equipped with gas or solid state 405 nm, 488 nm, 561 and 633/635/640 nm lasers. The system should be upgradable on site with more lasers, respective optics and electronics thereof.	10
2	The system should be a four-way sorter and supplied with at least a pair of $50\mu M$ , and $70\mu M(2\ Nos)$ , and $100\mu M$ nozzles. These nozzles should be replaceable by the end-users. The automatic drop delay determination system is required.	10
3	The collection device should have temperature controller to maintain the temperature of sorted cells and it should have holders for 96/384 well plates, 1.5ml microfuge tubes, 12 x 75 mm and 15 ml tubes.	5
4	Sample mixing and temperature control accessories should be provided	5
5	The system should be capable of acquiring and sorting at least 50,000 events/second with 98% purity or more.	5
6	The system should be capable of detecting at least 14 fluorescence parameters and two scatter parameters. The system should be upgradable up to 18-20 parameters. Fluorescence sensitivity should be high and it is a critical requirement and it should be less than 100 MESF for FITC.	10
7	The cell sorter should be equipped with aerosol management system and biosafety cabinet.	5
8	The system should be supplied with a standalone flow cytometric analyzer with at least 3 lasers and 8-10 parameters. The system computer of the analyzer should be loaded with FCS express software cable of performing DNA cell cycle analysis with a valid license for at least five years.	10
9	Flow cytometric analyzer: State-of-the-art flow cytometric analyzer should be equipped with solid state 405 nm, 488 nm, 561 and 633/635/640 nm lasers and each laser should have at least 100 mW of power. The system should be upgradable on site with more lasers, respective optics and electronics thereof.	10





# Institute for Stem Cell Biology and Regenerative Medicine

10	Fluorescence sensitivity should be high and it is a critical requirement and it should be less than 100 MESF for FITC. The system should be capable of detecting at least 17 fluorescence parameters and two scatter parameters.	5
11	All the necessary filters should be provided as mentioned in the tender	10
12	The system computer should be supplied with acquisition and analysis software with additional licenses for offline analysis. Latest PC Workstation, 160 GB Hard Drive, DVD/CD-ROM Read/Write Combo Drive, LCD monitor/s and laser based color printer.	10
13	The supplier should have proven capability in after-sale engineering service and application support in the field of flow cytometry instrumentation in India. The system should have 3 years of warranty.	5
		100

Evaluation will be carried out and those Vendors who score minimum 75% will qualify for Price Bid opening. Thereafter, Financial proposal shall be evaluated. The Commercially LOWEST BIDDER shall be the first preferred Vendor for award of Order.





# **READ**

#### **TECHNICAL SPECIFICATIONS:**

#### Specifications of High Speed Cell Sorter and Flow Cytometric Analyzer-Qty 01 No

#### High speed cell sorter:

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The collection device should have temperature controller to maintain the temperature of sorted cells and it should have holders for 96/384 well plates, 1.5ml microfuge tubes,  $12 \times 75$  mm and 15 ml tubes.

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The system should be capable of acquiring and sorting at least 50,000 events/second with 98% purity or more.

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The cell sorter should be equipped with aerosol management system and biosafety cabinet.

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#### Flow Cytometric Analyzer

State-of-the-art flow cytometric analyzer should be equipped with solid state 405 nm, 488 nm, 561 and 633/635/640 nm lasers and each laser should have at least 100 mW of power. The system should be upgradable on site with more lasers, respective optics and electronics thereof.

Fluorescence sensitivity should be high and it is a critical requirement and it should be less than 100 MESF for FITC. The system should be capable of detecting at least 17 fluorescence parameters and two scatter parameters. The system should be equipped with following dichroic mirrors and emission filters:





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No of Detectors	LASER	LASER Power	Dichroic	Band Pass	
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2			690LP	710/50	
3	405	100-111	635LP	670/30	
4	405 nm	100 mW	600LP	610 / 20	
5			505LP	525 / 50	
6			410LP	431/28	
7	488 nm		690LP	710/50	
8			505LP	530 / 30	
SSC		100 mW	Not required	488 / 10	
FSC			Not required	488/10	
9	561 nm	750LP 690LP 561 nm 100 mW 635LP	750LP	780 / 60	
10			690LP	710 / 50	
11			635LP	670/30	
12			600 LP	610 / 20	
13			Not required	586/15	
14			750LP	780 / 60	
15	633/635/640 nm	100	690LP	710/50	
16			100 mW	685LP	695/40
17			650LP	670/30	

The system computer should be supplied with acquisition and analysis software with one additional license for offline analysis. Latest PC Workstation, 160 GB Hard Drive, DVD/CD-ROM Read/Write Combo Drive, LCD monitor/s and laser based color printer.

The supplier should provide onsite hands-on training to the flow cytometry facility staff at ncbs.

The supplier should have proven capability in after-sale engineering service and application support in the field of flow cytometry instrumentation in India. The system should have 3 years of warranty.

Please submit separate price for each item in a single sealed (Financial Bid) cover.





#### INFORMATION TO TENDERERS

The Tender shall be evaluated under 2 (Two) Bid System

- I Technical Bid
- II Financial Bid

# TECHNICAL SPECIFICATIONS & EVALUATION CRITERIA WITH MARKS FOR 2 PART TENDER FOR "High Speed Cell Sorter and Flow Cytometric Analyzer-Qtv 01 No".

#### High speed cell sorter

#### **Technical Evaluation Sheet**

SI	Technical Requirement	Maximum Marks
No.		
1	Solid State lasers 405nm, 488nm, 561nm and 633/635/640nm	20
2	Four-Way sorter	5
3	Nozzles: 50μM, 70μM(2 Nos) and 100μM	5
4	Automatic drop delay system	5
5	Collection device: 96/384 well plates, 1.5ml microfuge tubes, 12 x 75	5
	mm, and 15 ml tubes.	
6	Temperature control for unsorted and sorted samples	5
7	Sample mixing device for unsorted sample	5
8	Fluorescence parameters – 14 Scatter Parameters	20
9	Fluorescence sensitivity < 100 MESF for FITC	10
10	Aerosol management and biosafety cabinet	10
11	System computer with acquisition and FCS express analysis software	10
		100

Evaluation will be carried out and those Vendors who score minimum 75% will qualify for Price Bid opening. Thereafter, Financial proposal shall be evaluated. The Commercially LOWEST BIDDER shall be the first preferred Vendor for award of Order.

#### Flow Cytometric Analyzer

SI No.	Technical Requirement	Maximum Marks
1	Solid State 100 mW lasers 405nm, 488nm, 561nm and 633/635/640nm	20
2	System should be upgradable on site	20
3	Optics – 17 fluorescence parameters, 2 scatter parameters	20
4	Sensitivity: 100 MESF for FITC	20
5	System computer should have 160 GB hard drive	10
6	Color printer should be supplied with the system	10
		100

Evaluation will be carried out and those Vendors who score minimum 75% will qualify for Price Bid opening. Thereafter, Financial proposal shall be evaluated. The Commercially LOWEST BIDDER shall be the first preferred Vendor for award of Order.

Please submit separate price for each item in a single sealed (Financial Bid) cover.

\* DURCHAS

For and on behalf of Institute for Steps Cell Biology and Regenerative Medicine

Purchase Officer