

Duke-NUS Cell Sorting Core Facility <i>Cell Sorting Form</i>	Prepared by:	DUKE-NUS Research Operations
	Email:	facs@duke-nus.edu.sg
	Tel:	65-66016287
	Effective from:	15 May 2018

Customer Information:

PI Name:		PI Email:	
Department & Institute:			
Billing Address:			
Requestor Name:		Requestor's Phone:	
Requestor Email:			
Fund/Grant Code (NCC):		WBS Account (Duke-NUS):	
Date/Time service required: (dd/mm/yyyy)	<input type="checkbox"/> Morning (__/__/__)		<input type="checkbox"/> Afternoon (__/__/__)

Operating hours: week days 10am-1pm (morning) and 2pm-6pm (afternoon)

Sample Declaration (Requestor to provide information):

Are any of the samples:

1. Of human origin? <input type="checkbox"/> Yes <input type="checkbox"/> No 2. Of non-human primate origin? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>a. If yes, are the animals negative for Herpesvirus B or SIV (Simian Immunodeficiency Virus) infection?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	<i>Please indicate species, source and clinical history of specimen.</i> Species: Source: Clinical History:	
3. Obtained from human subjects undergoing febrile illness of unknown origin? <input type="checkbox"/> Yes <input type="checkbox"/> No	4. Infected with HIV (Human Immunodeficiency Virus), HCV (Hepatitis C Virus) or any known Biosafety Level 3 pathogen? <input type="checkbox"/> Yes <input type="checkbox"/> No	5. Characterized by active viral replication (eg. <i>In vitro</i> infected cell lines)? <input type="checkbox"/> Yes <input type="checkbox"/> No
6. Transduced with plasmid or viral vectors? <input type="checkbox"/> Yes <input type="checkbox"/> No	<i>*If Q5 or Q6 is yes, please specify vector and/or infecting virus.</i>	

Sort Details (Requestor to provide information):

Type of sort: <i>single cell / tube / plate</i>	Nozzle size: 70 / 100 micron	Cell Type:	Fixed / Unfixed samples
Colors:	355nm (UV): <input type="checkbox"/> BUV737 <input type="checkbox"/> BUV496 <input type="checkbox"/> BUV395 405nm (Violet): <input type="checkbox"/> BV786 <input type="checkbox"/> BV711 <input type="checkbox"/> Qdot655/BV650 <input type="checkbox"/> BV605 <input type="checkbox"/> BV480 <input type="checkbox"/> BV421 488nm (Blue): <input type="checkbox"/> FITC/Alexa488/GFP <input type="checkbox"/> YFP <input type="checkbox"/> PerCP-Cy5.5/7AAD 561nm (Yellow-green): <input type="checkbox"/> PE <input type="checkbox"/> RFP/mCherry/PE-CF594 <input type="checkbox"/> PE-Cy5 <input type="checkbox"/> PE-Cy7 635nm (Red): <input type="checkbox"/> APC/Alexa647 <input type="checkbox"/> APC-Cy7		

Total number of cells: (pre-sort):	% of population of interest:	Concentration (Cells/ml):
Number of populations to sort:		

Service(s) Provided (to be filled by FACS operator):

Cell sorting FACS Aria II at **discounted rate of \$100 per hour** (excluding 7% GST) (*Usual rate: \$130 per hour*)

Date	Start Time	End Time	Total No. of Hours	Unit Price (\$)	Total Cost (\$)
				100.00	
				Grand Total (excl GST)	

Confirmation of Order:

I hereby declare that the information provided above is correct and that I have read and understood the terms and conditions for using the cell-sorting facility.

FACS Operator / Date

Signature of PI / Date

Acknowledgement of Services:

Service Completion Date (dd/mm/yyyy):

I hereby acknowledged that the service has been completed.

FACS Operator / Date

Signature of Requestor / Date

For Internal Reference Only

Billing Information:

Invoice Number/Date:

Payment Date:

Verified By:

Terms and conditions:

1. Contact **Charlene Foong Shu Fen or Daniel Anand Silva** at facs@duke-nus.edu.sg to plan a sort every time you want to do a new type of experiment to discuss the requirements and set-up of the machine.
2. Operation of the machine is strictly performed only by the core facility operators.
3. Charges for the use of this facility is \$100/hour excluding GST.
4. Sorts need to be scheduled at least 5 days before. A cancellation fee of \$100 applies for cancellations made less than **24** hrs prior to sorting. Users have to send a cancellation email to facs@duke-nus.edu.sg at least 24 hours prior to the time of the booking (preferably earlier so we can reschedule).
5. Please notify us as soon as possible if there are changes to the sort details provided in the form.
6. Requestors are responsible for providing:
 - The necessary controls to ensure the proper gating and identification of the desired cell populations.
 - Collection tubes containing the appropriate media for the sorted cells.

Sample preparation guidelines:

7. Samples have to be filtered through a 40 µm cell strainer to prevent clogging of the nozzle.
8. For standard sorts, a concentration of 10 million cells/ml is recommended (3-20 million cells/ml is the tolerable range for sorting).
9. Final cell yield is dependent upon many factors: starting percent of target population, total number of live and dead cells in the sample, cells stickiness, etc.
10. For improved cell yield, collection tubes can be pre-blocked overnight with media containing 10% FCS. The use of polypropylene instead of polystyrene tubes for collection can help to reduce cell stickiness.
11. Use of antibiotics in the collection media is recommended to prevent contamination but requestors should determine whether it is appropriate based on its effect on the sorted cell population.
12. Important information to note:
 - Size of your cells: to select the proper nozzle size
 - Cell Adhesiveness: to select resuspension buffer to minimize clogging
 - Total cell number: to achieve optimal sorting concentration (minimal clumping, maximum speed)
 - Approximate percentage of your target population: to determine sorting time and maximum possible yield

Biological hazards:

13. All potentially biohazardous sorts and protocols will have to be pre-approved by PI in charge.
14. Due to biosafety reasons **we will not sort**:
 - Samples containing lentiviral vectors
 - Radioactive or radioactive labelled samples
 - Human samples
 - i. Undergoing a febrile illness of unknown origin
 - ii. Infected with HIV, HCV or any BSL3 pathogen
 - iii. Characterized by active viral replication (eg. *In vitro* infected cells)
 - Mammalian / murine samples
 - i. Undergoing infections of unknown origin
 - ii. If infected by human pathogens, the same rules described above will apply
 - iii. Non-human primate cells infected with Herpesvirus B or Simian Immunodeficiency Virus