Singapore Immunology Network
SIgN

SIgN Flow Cytometry Platform

Interested?
Let's Get Started!

1 Create an Account
Click here to create an account on our booking system!
(For A*STAR users, click on the Profile tab to fill in your cost centre/WBS element)

Or email the Flow Platform with any enquiries/requests that you may have at flowcytometry@immunol.a-star.edu.sg

2 Selecting your Instrument
Based on your list of fluorophores required, select your instrument from our list of available analysers and sorters

If you are unsure if the fluorophores in your panel are compatible with our instruments, do contact our friendly Flow Team members for help!

3 e-Training (For Analysers Only)
Keep a lookout for the next available training!

Watch the videos and pass the quiz,
get access to the booking page and book your slots!

4 Book your Slot!
Slots open 14 days in advance on a first-come-first-serve basis. Fastest fingers first!

For bookings more than 14 days in advance, email Dr Hwang You Yi Leon and the Flow Platform for approval

Fair warning: Cancellation charges apply for cancellations made within 24 hours before the start of the session

5 Arrive & Thrive
Come by the Immunos Building Level 3, ring the doorbell by the lab entrance and follow the arrows to the Flow Lab at Lab 16!

Run your experiment (by yourself or with our Team) and have the data exported for your analysis

6 Acknowledgement & Payment
Wait for our email containing the draft invoice to acknowledge your sessions used (around mid-month)

The invoices will be sent to you at the end of the month

FYI.
Helpful Tips!

1 Our Operating Hours & Location
Monday -Thursday: 9 am - 6 pm
Friday: 9 am - 5.30 pm
(Closed on public holidays and the eves of New Year, Lunar New Year and Christmas)

For out-of-office hours usage of analysers, email your request to the Flow Platform and it will be granted on a case-by-case basis.

Our Address:
8A Biomedical Grove, Immunos Building, Level 3, S(138648)

2 List of Flow Instruments
BD Biosciences
- FACSymphony A3 (Alto)
- FACSymphony A3 (Tenor)
- FACSymphony A5 (Soprano)
- FACSAria Fusion (Bach)*
- FACSAria Fusion (Vivaldi)*
- FACSAria Fusion (Chopin)*
- FACSAria III**

** Cell sorter*
*** Cell sorter for yeast/bacteria*

Agilent
- Novocyte Penteon

Beckman Coulter
- CytoFLEX LX

Cytek Biosciences
- Cytek Aurora

Invitrogen
- BigFoot*

3 Changes to Your Bookings
Analysers:
- Please cancel your bookings on PPMS if you are unable to use it
- Rescheduling a slot within the same day on PPMS is free of charge
- Cancellations made under 24 hours from the start of the original slots will be charged at 50% of the original rate

Sorters:
- Rescheduling/cancelling your booking is free of charge if done at least 24 hours before the start of your scheduled session, you can do so using your PPMS account
- Changes within 24 hours of your session will incur a 50% fee and you need to email Flow Platform at flowcytometry@immunol.a-star.edu.sg to reschedule/cancel as it cannot be done through your PPMS account

4 Sample Preparation (For Sorters)
Sample concentration:
- Peripheral blood mononuclear cells (PBMCs): 10 million cells per mL
- Primary cell lines/tissues: 5 million cells per mL

Sample tubes & sizes:
- Polystyrene and Polypropylene
- Sizes: 5 mL tubes

Collection tube/plates & sizes:
- Polypropylene
- Tube sizes: 1.5mL microtubes, 5mL tubes and 15mL conical tubes
- Plates: 6 to 384 well-plate
- PCR tubes/strips: Only available for FACSAria sorters

After sorting, we recommend spinning down the sorted cells and/or resuspend the cells in fresh media before culturing with antibiotics

5 Time Required for Sorting
For BD FACSAria™
- Approximately 30 - 45 min per mL

For BigFoot Sorter
- Approximately 15 - 20 min per mL

6 Sample Preparation (For Analysers)
- Prepare sample in 5mL polystyrene tubes or in 96 well-plate for instrument with plate loader.
- Cell concentration: 1 million cells in 200uL of FACS buffer
- Sample to be re-suspended with a minimum of 200uL of FACS buffer for tube acquisition.

7 Sample Preparation Tips
Cell viability
- To gather data on the health of your samples, stain your cells with a cell viability marker such as Propidium Iodide (PI), 4',6-diamidino-2-phenylindole (DAPI), LIVE/DEAD Fixable Stains or Zombie Fixable Viability Dye

How to ensure samples are in single-cell suspension?
- Re-suspend cells in a buffer containing EDTA or DNase
- Filter the samples through a 70µm filter paper right before sorting

For cell sorting, what is your downstream experiments?
- For culture, use complete media with antibiotics
- For genome sequencing, cells can be sorted directly into lysis buffers

8 Flow Facility Etiquette
- Please be on time for your booking slots
- Refill the sheath tank and empty the waste tank at the end of your session (for analysers only)
- Filter the samples through a 70µM filter paper before sorting and/or acquisition
- Prepare samples in appropriate tubes according to the instrument of use
- If the sample is too concentrated, please dilute with FACS buffer
- Ensure collection tubes/plates contain media with antibiotics or FACS buffer (for sorters only)
- All samples must be kept in a closed-lid icebox containing sufficient ice during users' transportation of samples to the SIgN Flow Platform. This is to maintain cell viability and prevent photo-bleaching of fluorochromes
- All researchers must wear lab coats, covered pants and shoes, gloves and safety eyewear

9 Tell Us How We Did
(So that we stay open ☺)

Click here to give us feedback on the good and bad so that we can improve your experience!