



Mass Spectrometry Facility
Division of Biological Sciences
Indian Institute of Science
msfacilityiisc@gmail.com | Ph: +91 8022933053

Date: _____

Name: _____ Supervisor: _____ Organization name: _____

No. of samples: _____ Phone No: _____ E-mail id: _____

Source/taxonomy: _____ Sample Label: _____

Concentration: _____ Quantity: _____ Solubility: _____

Storage condition: _____ Sample state: _____ Expected mass/
mass range: _____

Objectives and sample preparation procedure (reference paper if any) briefly*

LC-MS Services

Orbitrap Fusion ☐

Q-ToF (Impact HD) ☐

Q-ToF (Ion Mobility) ☐

Trypsin Digestion ☐

GC-MS Services

Headspace ☐

SPME ☐

Liquid ☐

Derivatization ☐

MALDI-TOF

MS ☐

MS/MS ☐

Trypsin Digestion ☐

Debit Head (IISc Users) *: _____

For External Users: Mode of Payment- NEFT / RTGS / UPI

Billing address*: _____

GST number*: _____ Transaction details*: _____

Signature of the user*

Signature of the supervisor*

* Mandatory fields must be filled in.

Important General Notes:

1. Sample submission and brief discussion timings are 11:00 AM–12:00 PM for IISc users and 2:30 PM–3:30 PM for external users. Users are requested to submit samples only during the designated timings and after obtaining prior confirmation via email.
2. Users are not permitted to remain inside the facility during sample analysis or instrument operation.
3. The sample submission form must be completely filled out and signed by the user and Supervisor/PI.
4. All samples must be properly labelled with a unique sample ID.
5. Users are responsible for ensuring that the submitted samples are compatible with the requested analytical technique.
6. Trypsin digestion is available only for external users. IISc users are required to perform trypsin digestion before sample submission, except for samples intended for Orbitrap Fusion analysis.
7. Except for trypsin digestion and derivatization where applicable, the facility does not provide sample preparation, purification, or isotopic labelling services.
8. Additional charges may apply if a sample requires repeat analysis or an additional instrument slot.
9. Turnaround time is generally 15 working days and may vary depending on instrument availability, sample queue, sample complexity, and instrument condition.
10. Samples may be discarded after the completion of analysis.
11. Raw data will be retained on the facility computer for a maximum of 6 months from the date of data acquisition, after which it will be permanently deleted. Users are therefore requested to collect and securely store their raw data immediately upon completion of the analysis.
12. **Users are requested to acknowledge the Mass Spectrometry Facility, Division of Biological Sciences, Indian Institute of Science (IISc), in publications, theses, or other scientific outputs arising from data generated using the facility.**

LC-MS / MALDI-TOF Sample Submission Guidelines:

1. Submit samples in MS-compatible solvents/buffers such as water, methanol, acetonitrile, ammonium acetate/formate, ammonium bicarbonate, or dilute formic acid.
2. Avoid non-volatile salts, detergents, chaotropic agents, and non-volatile solvents such as DMSO, DMF, and glycerol.
3. If unavoidable, samples should be desalted or purified before submission using an appropriate method.
4. Ensure samples are completely dissolved/homogeneous and free of visible particles or precipitates.
5. For proteomics samples, provide relevant information such as organism, protein identity, enzyme used for digestion, modifications, and sample complexity.
6. Instrument-specific Information:
 - **Q-TOF (Impact HD):** No dedicated metabolite library is available for compound identification. For proteomics analysis, protein identification can be performed using Mascot database searching.
 - **Orbitrap Fusion:** For metabolomics analysis, compound identification is supported using available metabolite libraries and databases through Compound Discoverer software. For proteomics analysis, Proteome Discoverer software is available for data analysis.

GC-MS Sample Submission Guidelines:

1. Samples should be volatile and thermally stable under GC-MS operating conditions.
2. Samples should be free from water, non-volatile salts, detergents, and other non-volatile contaminants.
3. For derivatization, specialized reagents should be provided by the user.
4. Ensure that samples are clear, homogeneous, and free of visible particles.

Contact/ Sample submission address:

Mass Spectrometry Facility,
Room No: FC-02/ 03, 1st Floor, C-Wing,
New Biological Sciences Building,
Indian Institute of Science,
Bangalore-560012
Phone: 080 2293 3053.
Email: msfacilityiisc@gmail.com