Max Perutz Laboratories - Mass Spectrometry Facility

Sample submission guidelines for intact protein mass determination

- We measure samples for intact protein mass determination at least once a week, please contact us in advance to arrange a suitable time.
- If there is high demand further service days will be introduced.
- Please have a thorough look on our sample preparation guidelines for intact proteins below to avoid the most common problems.
- Please fill out the submission form for intact mass and send it via email.
- Result turnaround time: approximately 2-5 workdays, for standard samples, depending on workload.

Sample preparation guidelines for intact protein mass analysis

- Min. 10 μ L of 0.5-1 mg/mL purified protein(s)(or 0.1-1 pmol as a rough guideline; we do inject less eventually but prefer to have some more sample as a buffer)
- Standard biological buffers such as TRIS, HEPES or PBS are compatible.
- Glycerol < 5%, most salts, and reducing agents are acceptable. Nevertheless, try to keep the concentration of all these agents as low as possible (especially salts).
- NO detergents (SDS, Triton, etc.) and stabilizers such as PEG are allowed!
- When the protein is lyophilized, reconstitute it in 5% organic solution (acetonitrile or methanol) with 0.1% formic or acetic acid or submit the dry sample and we will do this for you.
- Samples will be reduced by default, unless you specify a reason against it.
- If possible provide a gel picture of the sample to be submitted.