

Attachment II Instructions for sending samples

AbLab is performing MS analysis of denatured and native protein complexes.

What solution you should prepare your protein sample into?

Depending on your application several options can be discussed. Ideally, the samples are kept in their physiological buffer as long as possible. In most cases, customers have their proteins dissolved in solutions containing buffers and salts. Prior to analysis this buffer will be exchanged to a mass spectrometry suitable buffer, like ammonium acetate. However, not all solutions are suitable. This is why we recommend to only use the following components.

Acceptable components: buffers (tris, ammonium buffer, HEPES, PBS), salt (NaCl, KCl), chelators (EDTA), reducing agents* (DTT, TCEP, 2-mercaptoethanol).

When measuring the denatured protein, chaotropes (guanidine, urea) are also acceptable.

Components to avoid: detergents (SDS, Triton, CHAPS), stabilizers (PEG, glycerol >10%)

*Reducing agents cannot be in the solution with the proteins for longer than 2 days. Prolonged contact of reducing agent may cause modifications on the protein cysteine residue.

What amount is needed?

The success of the intact mass measurement depends on many factors, including how pure the sample is (single protein vs. a complex mixture) and how well the protein ionizes during electrospray ionization. To increase the chances of success, improved purity of the sample is the most important, followed by the concentration. Experiences show that a sample volume of 100 μ l with a minimal concentration of 5 μ M is a good starting point.

What else is required for sample submission?

When a sample is submitted we will ask you for the following information:

- 1) All buffer components and concentrations
- 2) Protein concentration
- 3) Sample volume
- 4) Molecular weight of protein of interest

Directions for sending samples

During the shipping the proteins should stay intact. If the samples need to stay cool, make sure that they can be kept frozen for a period of 48 hours. Sending the samples in the beginning of the week will prevent the arrival of the samples during the weekend

Shipping address:

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