GUIDELINES AND INFORMATION FOR CUSTOMERS OF CFMP ZMBH

Title: Protein identification from polyacrylamide gels (SDS-PAGE)

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1. PURPOSE

This document describes the recommendations regarding sample preparation and submission to Core Facility for Mass Spectrometry and Proteomics for **protein identification from polyacrylamide gels (SDS-PAGE)**.

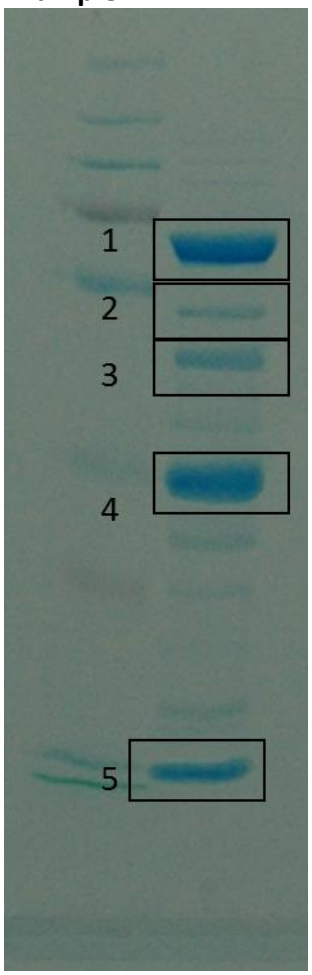
2. DURING INITIAL MEETING INFORM US ABOUT

- Do you already have iLab account? https://hmls.corefacilities.org/service_center/show_external/3564?name=core-facility-for-mass-spectrometry-proteomics
- Do you work with membrane protein?
- Protein length and specific features regarding protein sequence (amino acids sequence)
- What is the source of the protein?

3. RECOMMENDATIONS

- If needed, use only detergents compatible with in-gel digest:
  SDS < 2%
  CHAPS < 4%
  NP-40 < 1%
- You can obtain an aliquot of fixing solution and colloidal Coomassie if you would like to run the gel in your lab but **you can run gel in our facility**. We offer commercial gels (20€ / gel). One can load protein marker and up to **9 samples**. The maximum sample volume is **40 µl.**
- In order to run the gel in our facility, please contact **Sabine Merker by e-mail** and set an appointment**.**
- Always, bring with you **your elution buffer. We strongly recommend** to load **neighboring lanes** with your **elution buffer.**
- To ensure proper separation on the gel, mix your **marker protein** with appropriate amount of **SDS sample buffer.**
- Use **commercial gels** (higher reproducibility and resolution, reduces contamination)

- For protein identification from the gel, run your gel for **full gel length**. Then simply stop the electrophoresis, rinse the gel shortly with dH_2O, incubate with fixation solution for 20 min with moderate shaking and stain with colloidal Coomassie for 1-4h.
- Make a picture of the gel, **mark the lanes on the picture** (preferentially in PowerPoint) and upload it to iLab. File upload is possible after the project request is created.
  Example:



4. GENERAL INFORMATION

- We will provide you the results within 4 weeks from the sample submission
- Your samples will be analyzed using a 30 min peptide separation method (52€/sample (internal); 65€/sample (external)).