

Protein Science Facility, Karolinska Institutet

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The Protein Science Facility (PSF), established in 2011, provides full service in protein production, macromolecular crystallography and biophysical characterization of proteins. We also offer user training and access to equipment for macromolecular crystallography and biophysical characterization of proteins.

PSF is open to both academic and non-academic users and provides services to groups from all major Swedish universities, a range of companies, and research groups in over 10 other countries worldwide.

PSF works with 70-80 user groups yearly and has supported well over 300 unique groups since the start. The work of PSF has so far contributed to over 280 publications.

Since 2022, PSF is part of the VR-funded national infrastructure **Protein Production Sweden (PPS)**. PPS consists of seven labs from KI, UmU, KTH, GU, and LU offering a range of different expression systems and aiming to share resources and expertise for the benefit of the user community.

This poster presents the protein production services of PSF.

PSF offers expert service and advice at all levels of protein production:

- Advice, discussion, and evaluation of new projects
- Molecular biology services and assistance in expression construct design and ordering
- Small-scale expression and solubility tests in bacterial cells
- Liter-scale (1 - 20 liter) production cultures in bacterial cells
- Protein purification using a range of established protocols

Our clients work in a wide range of research areas, such as structural biology, biochemical studies of protein function and interactions, cell biology, assay development, drug lead development, imaging studies, as well as antigen and antibody production. PSF also provides its user base with various utility enzymes, for instance DNA/RNA polymerases, ligases and reverse transcriptases, proteases, Cas enzymes, Tn5 transposase, and Sortase A variants.