

Protein Science Facility, Karolinska Institutet

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The Protein Science Facility (PSF) provides protein production services, and user training and access to equipment for macromolecular crystallography and biophysical characterisation of proteins.

PSF started in 2011 and has served its user community for 13 years. PSF is open to all academic and non-academic user groups and works with groups from all major Swedish universities, a range of companies, and research groups in over 10 other countries worldwide.

PSF works with 60-70 user groups yearly and has worked with over 280 unique groups since the start. The work of PSF has so far contributed to over 250 published papers.

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 that offers a range of different expression systems and aim to share resources and expertise to 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, and antigen and antibody production. PSF also provides its user base with many utility enzymes of different categories, for instance DNA/RNA polymerases, ligases and reverse transcriptases, proteases, Cas enzymes, Tn5 transposase, and Sortase A variants.