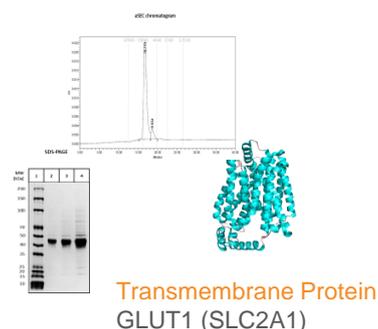


# Protein Science

## About Protein Science in WuXi Biology

Benefiting from 15 years of expertise in protein production, the Protein Science platform in WuXi Biology has successfully served hundreds of global clients. Our protein science specialists in Munich and Suzhou sites are at the forefront of international drug discovery efforts, offering a wide range of services including protein production and various techniques of structural biology including X-ray crystallography, NMR and cryo-EM.



- Protein production sites in Suzhou and Munich
- Complete tech-support from end to end
- Comprehensive biophysical, biochemical, structural biology services available

- Core protein production instruments **>25**
- **>98%** expression success rate in 2023 - 2024
- Annual protein production targets **>1200**
- Annual protein expression volume **> 10000 Liters**

- Experienced in
- Cancer and inflammation, neurodegeneration, epigenetic targets, immune system, RNA/DNA modifying proteins
  - Membrane Proteins

## Why Choose WuXi Biology?

### Construct Design & Protein Production

- Tailored towards the need of the screens
- Different Tags, domains, isoform, mutant design
- Different expression system
- Choice of QC standard

### Challenging Target

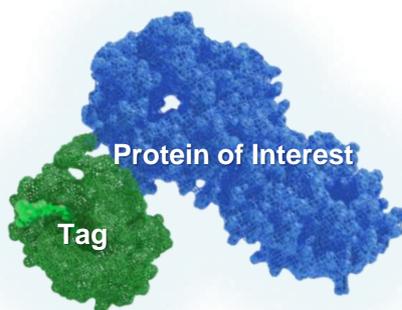
- Protein Complexes, DNA /RNA Modifying Proteins, Membrane Proteins

### High Quality & Reproducibility

- High quality consistency from bath to batch
- >90% high purity for most of the protein

### Various Downstream Services

- >1200 assay grade and >250 crystallization grade proteins produced
- Thermal stability: TSA, nanoDSF
- Aggregation: DLS, analytical SEC, FSEC, SEC-MALS
- Biochemical & Biophysical: HTRF, TR-FRET, MST, SPR, BLI, ITC



### Fast Response

- 3 weeks delivery upon request
- 3-5 business days for world-wide dry-ice package delivery

### Technical Support

- Within 12 hours fast response, professional support from Ph.D. based teams
- One-stop consultative services from structural design to protein delivery

## Structural Biology Services

### X-Ray Crystallography

- > 15 years structural biology experience
- 1:1 ratio PhD to non-PhD scientists
- > 200 crystal high-quality structures delivered each year
- World most intense in-house light source with synchrotron-quality, immediate data collection
- Weekly access to various third-generation synchrotrons



Bruker MetalJet and ESRF (Beamline id30a1) Data Comparison  
With 2.0 Å resolution structure (HDAC2)

### Service Mode

Various service models suitable for different research scenarios to accelerate your scientific research progress.

#### ■ XPRESS

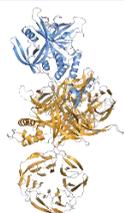
- Over 150 off-the-shelf targets
- Broad range of targets and classes
- Established protocols for protein production and crystallization
- 2 months turn-around time

#### ■ XPEDITE

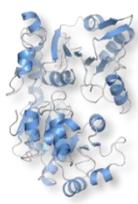
- Gene-to-structure service based on published structures
- 3-4 months turn-around time

#### ■ XPERT

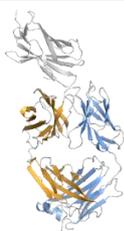
- Gene-to-structure service for challenging projects - de novo structure determination, protein-protein and protein-nucleic complexes, membrane proteins
- > 4 months turn-around time



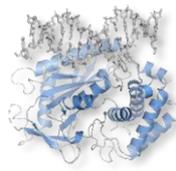
Cereblon-DDB1  
*E3 family*



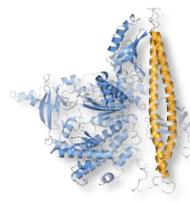
WRN  
*Helicase family*



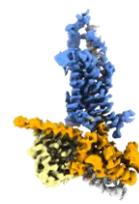
*Antigen-antibody*



cGAS-dsDNA  
*Nucleic acid binding protein*

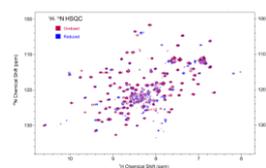


PIK3C $\alpha$ -PIK3R1  
*Phosphatidylinositol kinase*



PAC1R  
*GPCR*

### NMR Spectroscopy

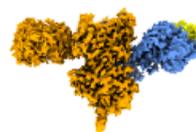


**Protein-based 2D HSQC**  
Redox-state-dependent chemical shifts of Ttrp

doi:10.1021/bi400296c

- 1D STD and 2D HSQC available
- Proteins real-time conformational changes can be detected
- Provide binding position information
- Very low false positive/negative probability
- Deliver SAR information

### Cryo-EM



**CRBN-DDB1-IKZF2**  
3D refinement to 2.7 Å resolution

- Sample is maintained in native state in vitrified ice condition
- Suitable for protein complex and membrane protein



## Contact Us