

Your Partner in Drug Discovery for Targeted Protein Degradation and Molecular Glues

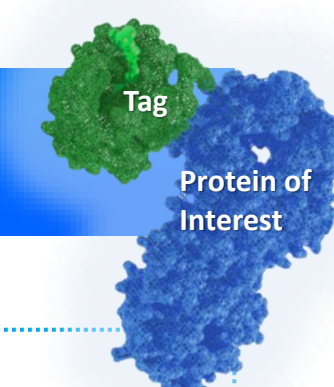
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Highlights of our TPD Discovery Platform

Since 2016, WuXi Biology has built a comprehensive **Targeted Protein Degradation (TPD) and Molecular Glues (MG) discovery service platform**. It covers 20+ assay technologies - making it ideal for investigating the TPD function cycle from **binary/ternary complex formation** to **POI ubiquitination** and **degradation**. The platform covers a diversified collection of TPD modalities including proteolysis targeting chimers (**PROTACs**), molecular glue, lysosome-targeting chimeras (**LYTACs**), deubiquitinase-targeting chimeras (**DUBTACs**), degrader antibody conjugates (**DACs**) and more.

Here we demonstrate the capabilities of our TPD and MG platforms and share the research strategy with relevant case studies, spanning our expertise that covers the whole early stage drug discovery workflows: **protein science and production, structural biology, hit identification and profiling** and **MedChem capabilities**.

Protein Sciences



Tailored Construct Design & Engineering

- Choice of tag, domain, isoform, mutant, expression system, QC standard

Comprehensive Protein QC

- Purity, dispersity, PTMs, sample identity, MW & dispersity, thermal stability & folding, dispersity & hydrodynamic radius

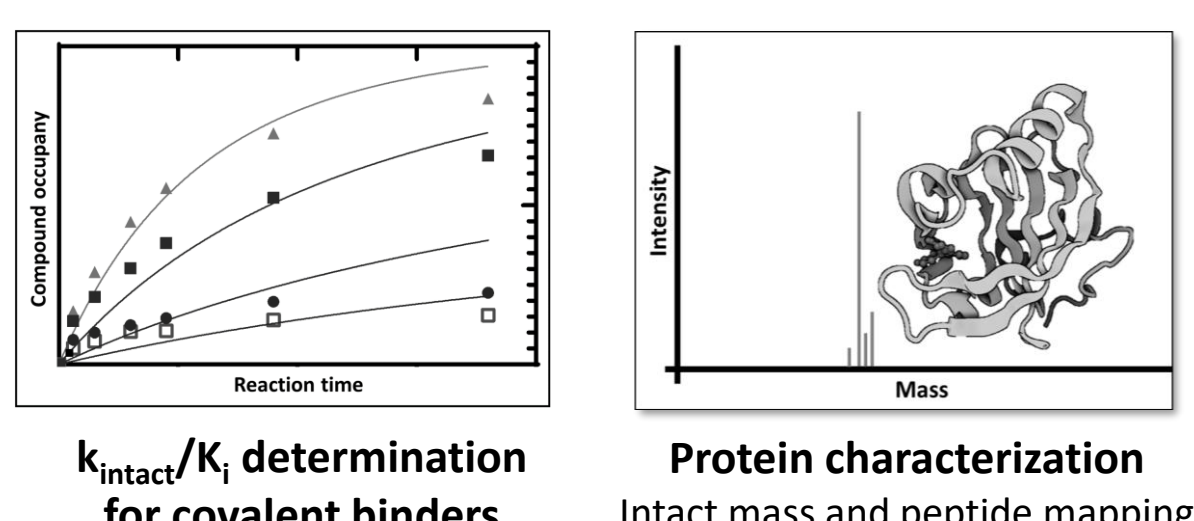
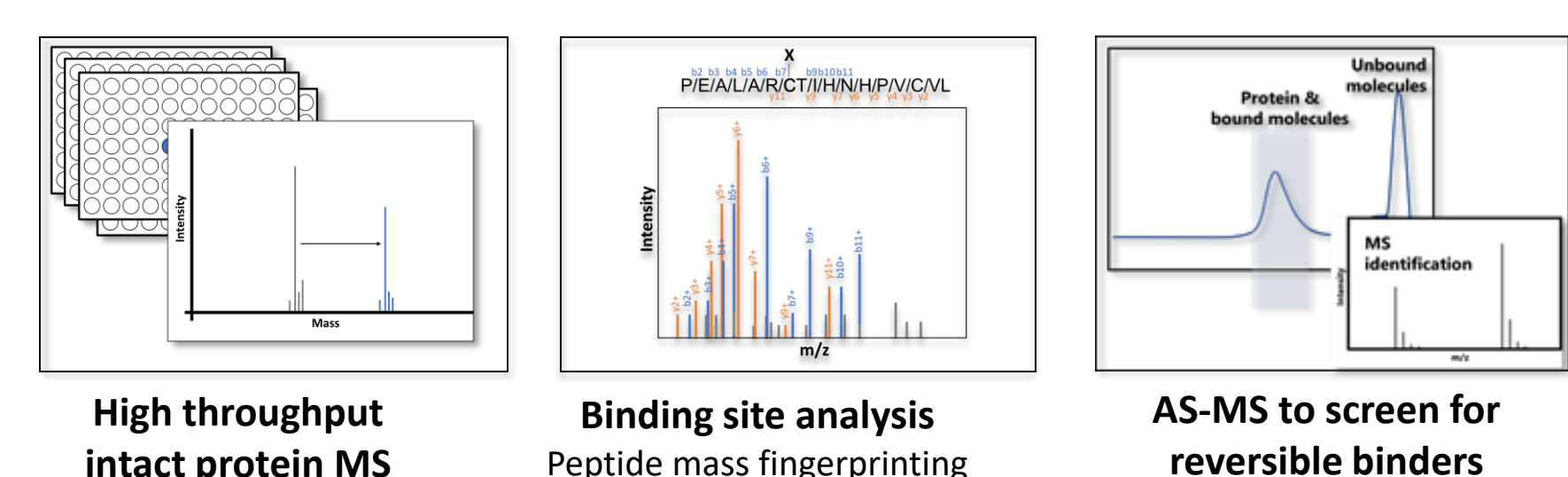
Recombinant Protein Production

- E.coli, insect & mammalian cells, yeast
- Antibodies and nanobodies, membrane proteins, SLCs and transporters (detergents, Nanodiscs, polymers, Salipro®)

Covers All Target Classes and Challenging Proteins

Cancer and Inflammation	>1500 Proteins Produced
Membrane Proteins	
DNA Damage Response	
Neurodegeneration	1200 Assay Grade Proteins
RNA/DNA Mod. Proteins	
Epigenetic Targets	>250 Crystallization Grade Proteins
Immune System	

Proteomics and MS platform



Your TDP Toolbox

Proteins off the shelf

- AR, BCL2L1, BCL6, BTK, CDK4, CDK6, CSNK1A1, CTNNB1, EHMT2, ELAVL1
- ERG, ESR1, FUS, GSP1, ACYL, ARHGFE2, ASS1, BUD31, CHD4, CS
- CSDE1, CSNK1A1L, CSTF2, EHM1, EWSR1, GZF1, HIC2, HNRNPDL

Constructs ready for expression

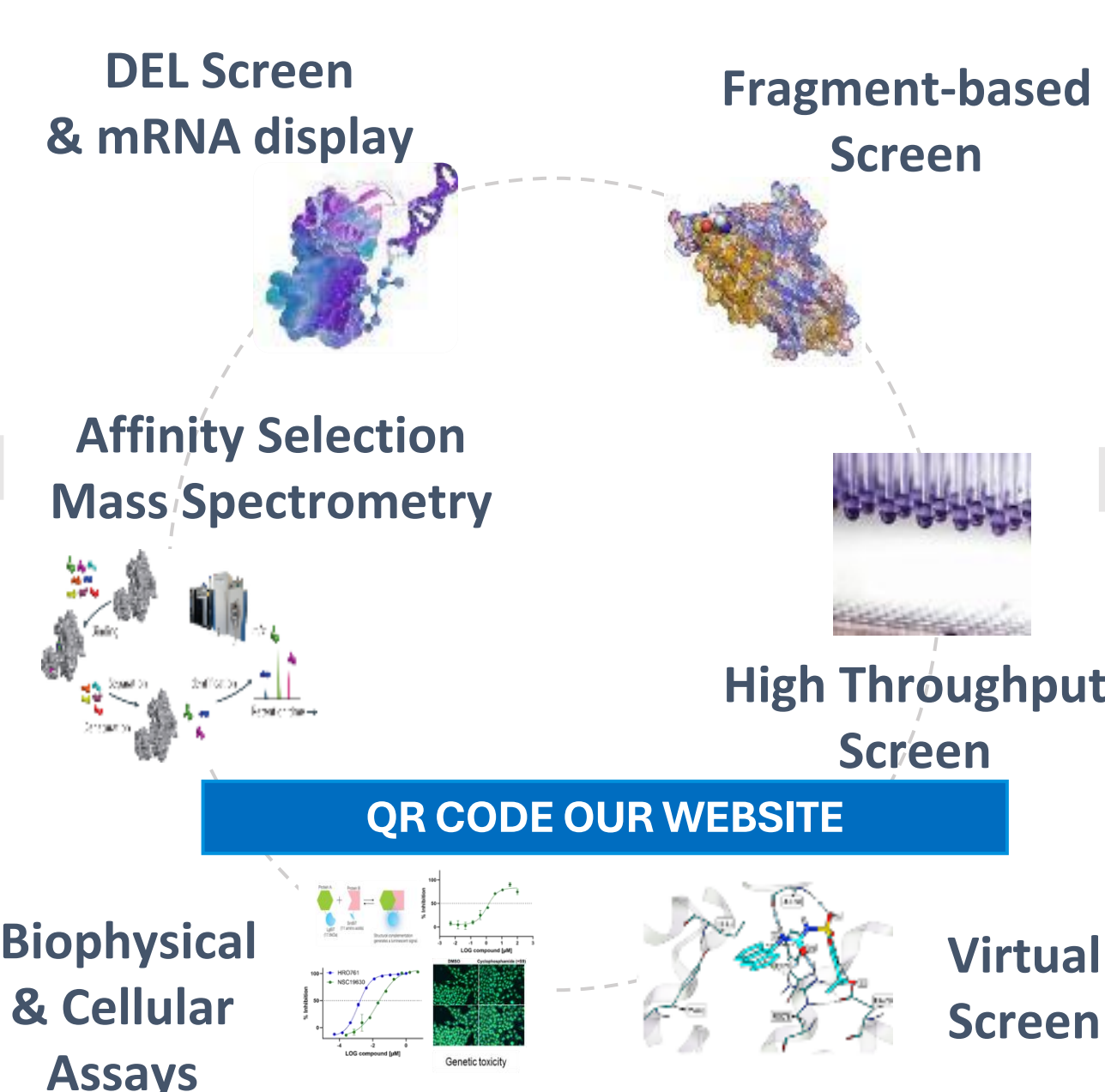
- IKZF1, IKZF2, MTA2, MYC, PDE6D, PLK1, RBM39, SALL4, SCYL1, STAT6, USP7
- VAV1, WEE1, IKZF3, IRAK1, KDM1A, MARS1, MCL1, MNAT1, MTA1, PABPC1, RNF166
- SHMT2, SND1, ZBTB16, ZBTB26, ZBTB39, ZBTB44, ZFP91, ZNF692, ZRANB2

Hit Identification and Profiling Platforms

Diverse Library Options

- Diversity Library: Drug-like small molecule
- Specialty Library: Target class or disease area focused
- New Modality Library: Novel chemical space

Comprehensive Screening platforms



Computational Models

- Structure Models
- Ligand Models
- Pocket Analysis

Dianthus uHTS: Novel ultra-high-throughput biophysical platforms for direct binding

Biophysical Precision:

- Affinity-based measurements in free solution
- Mass-independent detection down to picomolar range
- Screen any target or library with unmatched sensitivity

Ultra-Fast Throughput:

- 1536-well plates in 7 minutes
- 370,000 compounds in two weeks

Efficient & Scalable:

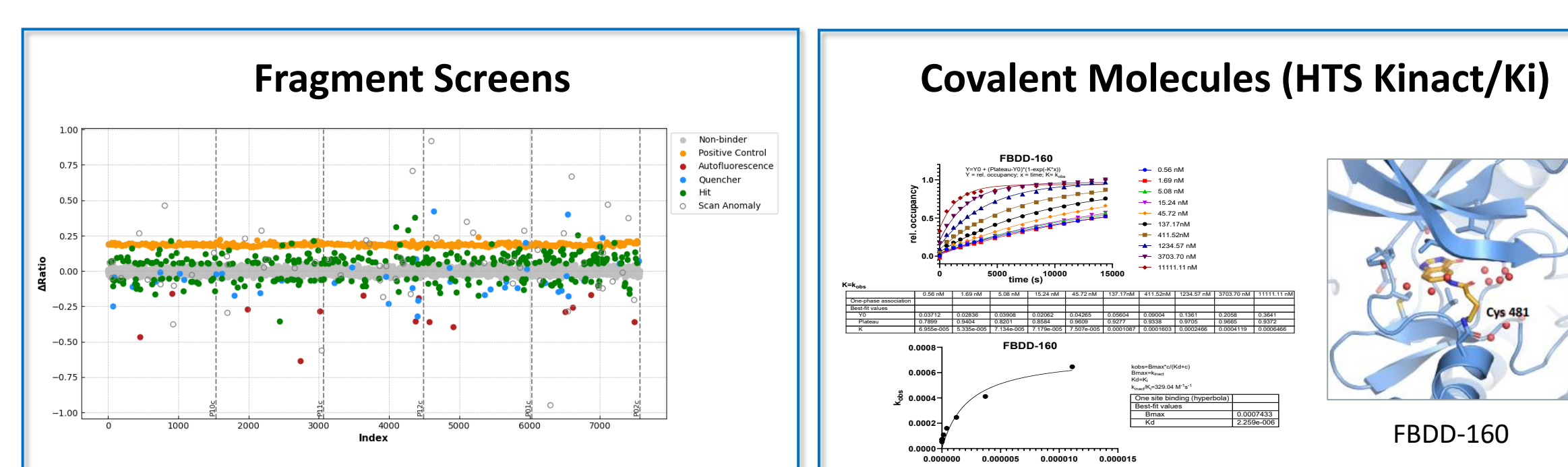
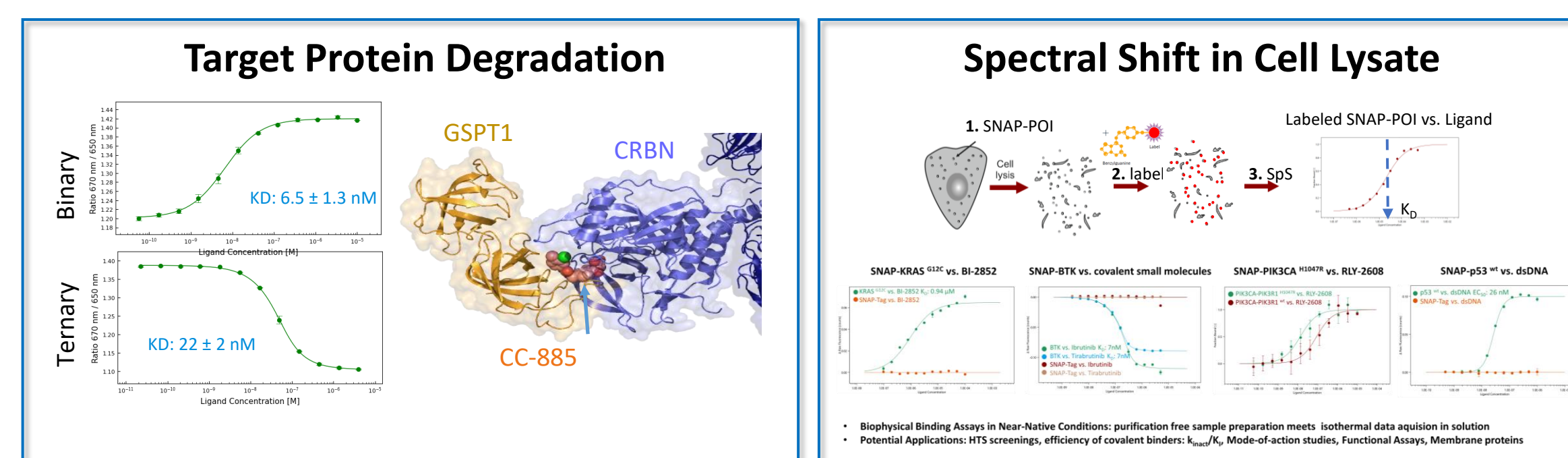
- Low sample consumption & simple assay design



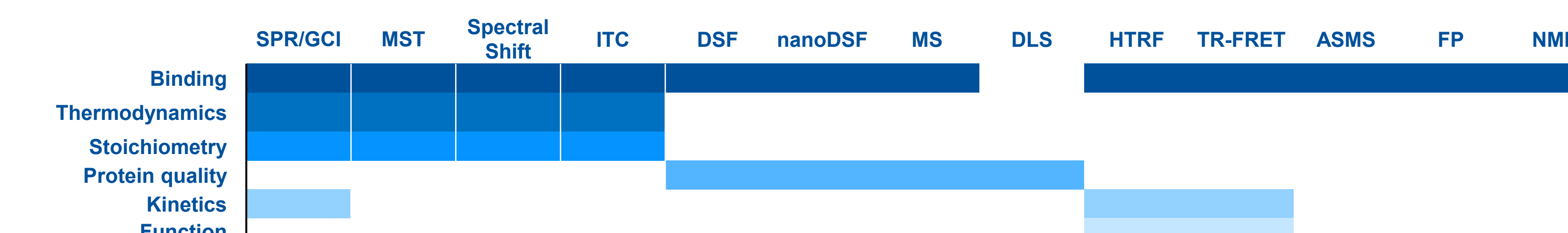
Proven Technology:

- In successful use at WuXi AppTec since 2022

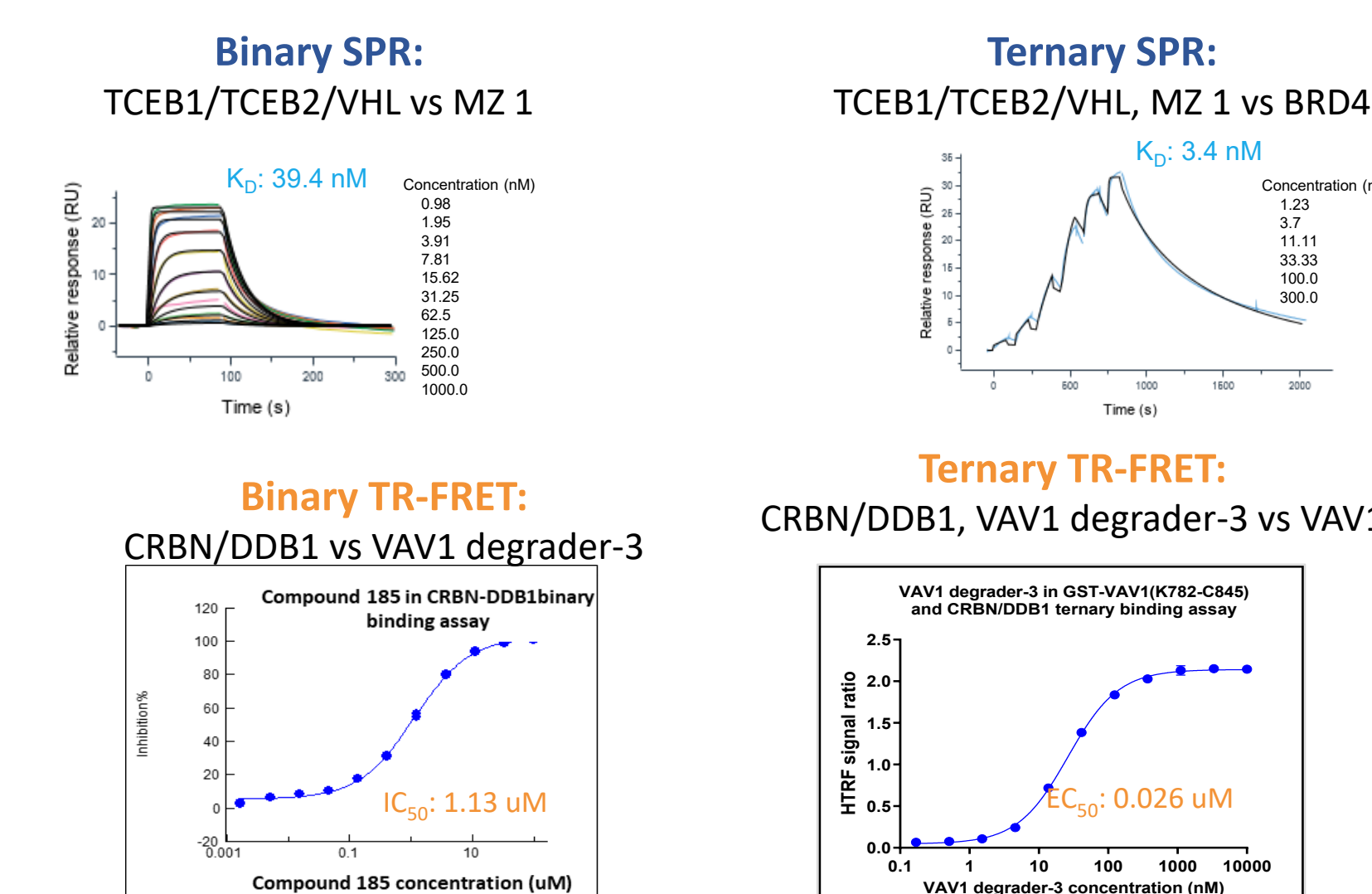
Spectral Shift Applications for any step of the workflow



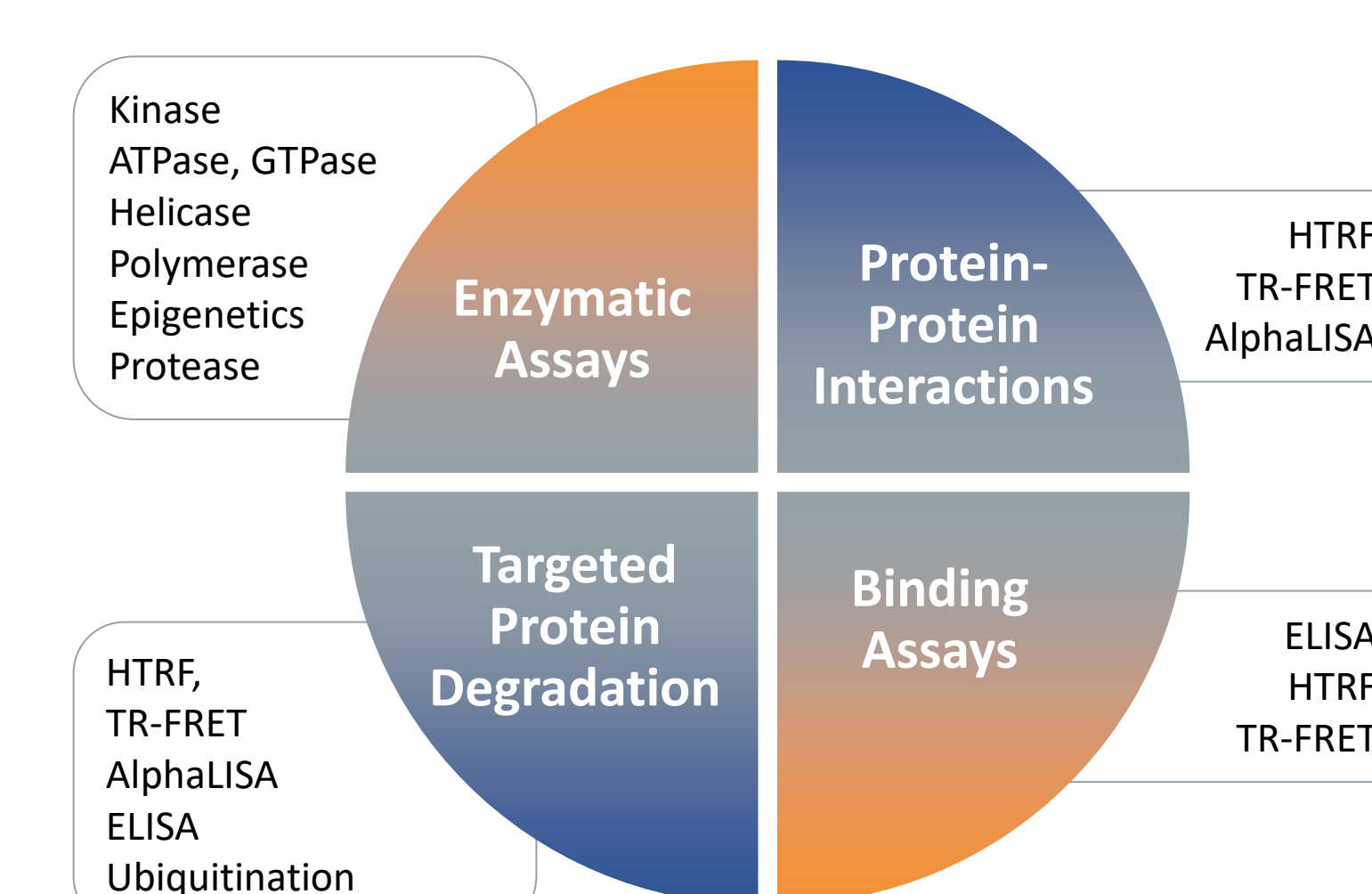
Biophysics and Biochemical Assays



Cooperativity Evaluation with Biophysics

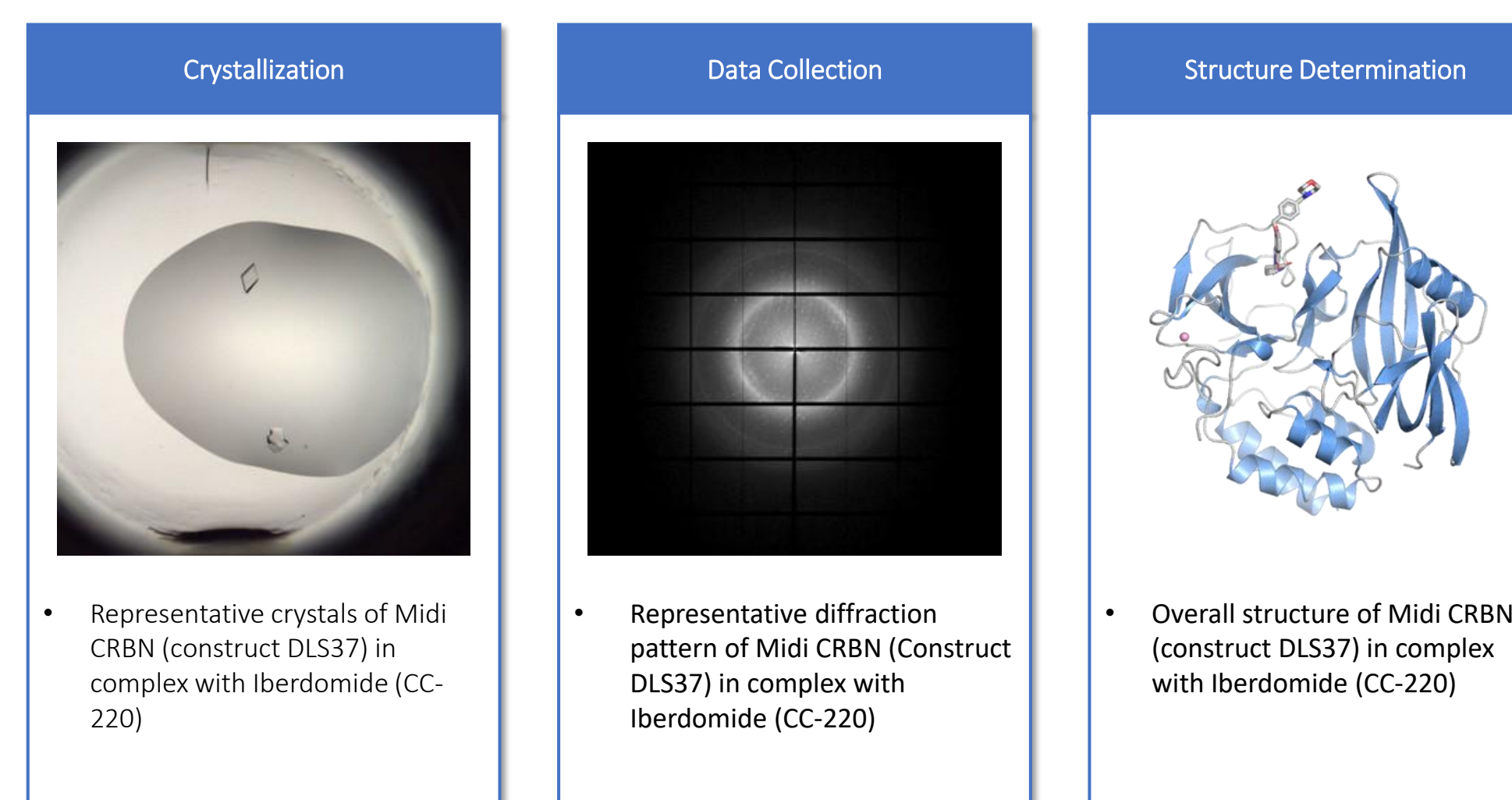


Biochemical Platform

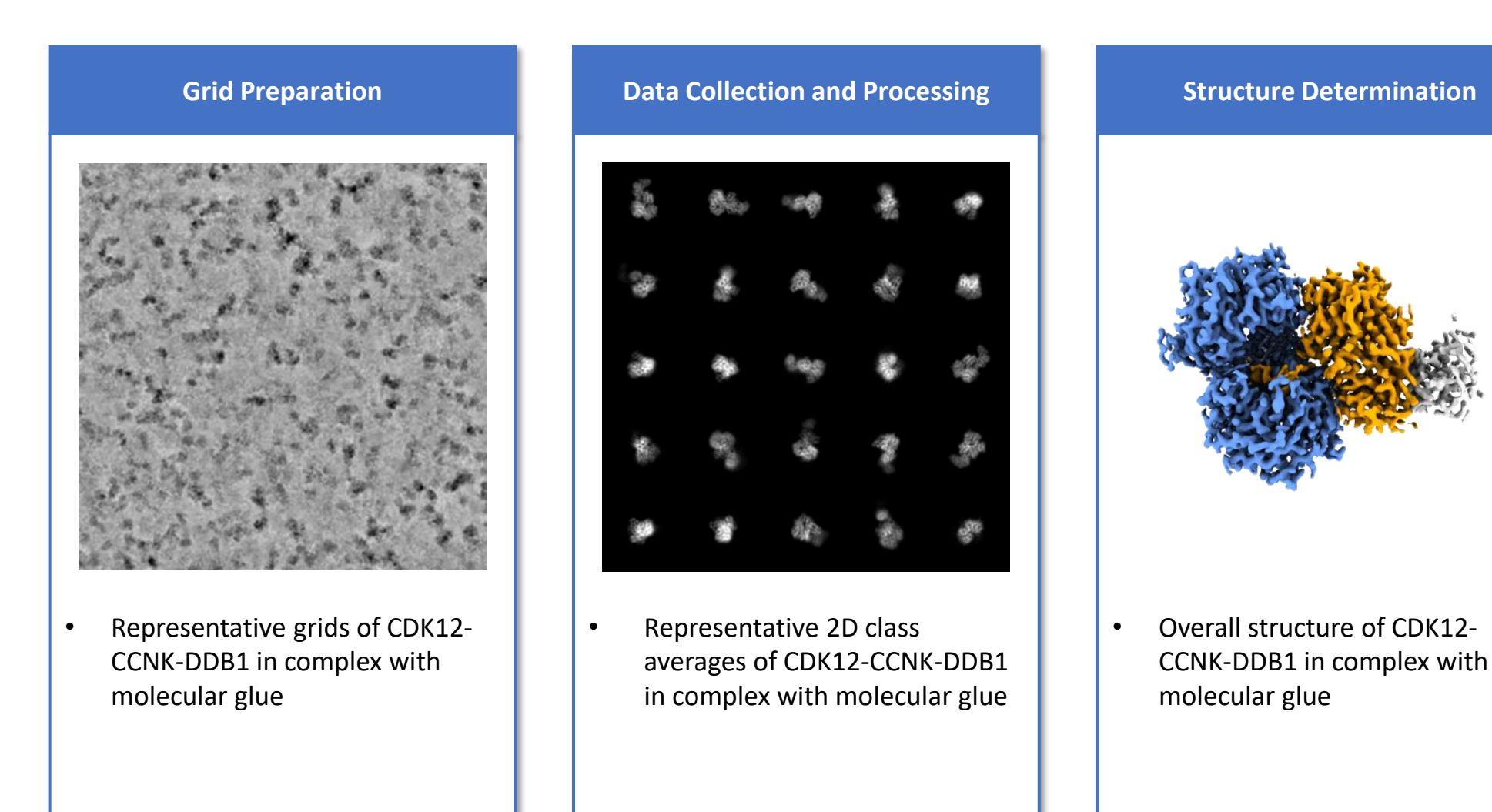


Structural Biology Expertise

Structure determination of CRBN-binding warheads with X-ray Crystallography



CryoEM to understand ternary complex and Molecular Glues function



Explore our off-the-shelf and ready-to-go TPD and MG targets

Biophysics & Screening

	binary	ternary
CRBN-DDB1	SpS, SPR	SpS, SPR
VHL	SpS, SPR	SpS, SPR
DCAF15	SpS	SpS
DCAF16	SpS	SpS
DCAF11	SpS	SpS
DCAF12	SpS	SpS
CKS1B:SKP1:SKP2	SpS, SPR	SpS
GID4	SPR	SPR

Crystallography | Cryo EM

CDK12-CCNK-DDB1 Ternary Complexes | CRBN | DDB1 | CRBN-DDB1 | CRBN-DDB1 Ternary Complexes | SKP1-SKP2-CKS1 | VHL-Elongin B-Elongin C

Check out our fastest turnover targets for your projects!

