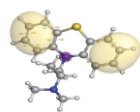
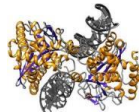


SCREENING SOLUTIONS

Diverse Library Collection



Diversity Library
Drug-like small molecule

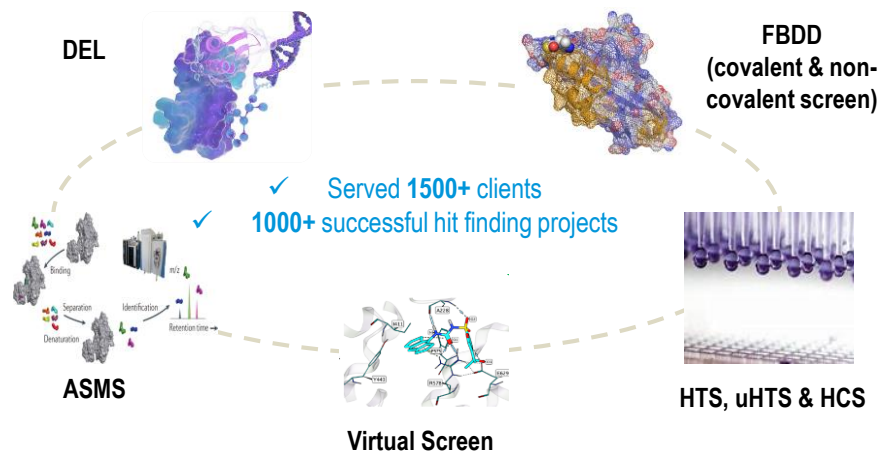


Specialty Library
Target class or disease area focused, kinase, protease, CNS, RNA, etc.

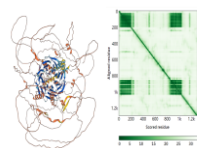


New Modality Library
Novel chemical space including covalent, bi-functional and cyclic peptide

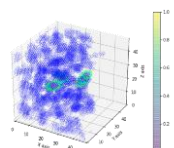
Comprehensive Screening platforms



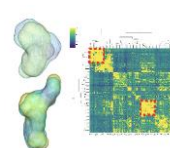
Data Science



AlphaFold



Machine Learning



Pocket Analysis



Ready-To-Go Assays for Broad Range of Drug Targets



Established Assays
Optimized assay conditions



Flexible
Single/multiple assay in parallel



Cost-effective
Low budget high quality data



Fast Turnaround Time
Up to 2 weeks

Targets ready for MST, TRIC, SPR, nanoDSF, biochemical assays

ALK
BTK
NLRP3
KRAS/NRAS
PIK3CA/PIK3R1
PRMT5/WDR77
STAT2,3,4,5a,5b,6
CDKs/CCNs
STING
USP5, USP7
WRN / RECQL / RECQL4
VHL/TCEB1/TCEB2
p53

AKT1
BLM
CCNH/CDK7
CRBN/DDB1
cREL
DOCK5
EGFR
SMARCA2
WEE1
P38
PolQ Polymerase / Helicase Domain
SHP2
...



Find more
READY-TO-GO Assays
target list & case studies

WuXi Biology web



Follow LinkedIn



CRELUX
a WuXi AppTec company



Contact Us via E-Mail:

Crelux_CR@wuxiapptec.com

DB_Service@wuxiapptec.com

ONE-STOP TARGET-TO-HIT SOLUTIONS



Protein

- All Target classes
- High level protein engineering
- Tailored tagging strategies
- *E.coli*, yeast, insect cells, mammalian cells
- Customized conjugation (e.g., biotinylation)
- Recombinant protein production
- Isotope labeling (15N, 13C)
- Antibody screening and Nanobody
- Comprehensive protein QC

Screening

Fragment Based Screening (FBDD)

- WuXi AppTec fragment library (~4600 fragments)
- WuXi AppTec covalent fragment library (~2500 covalent fragments)
- Automated screening (MST/Dianthus, SPR, DSF/nanoDSF)
- Fragment screening via X-ray or NMR

DNA-Encoded Library (DEL)

- 80+ billion synthetic compounds
- Bioinformatics system to collect, process and analyze data, facilitate involvement of the client to make collective decisions
- DEL + ML

High Throughput Screening (HTS)

- WuXi AppTec HTS library (~300K)
- Target assay that can be miniaturized

Affinity Selection Mass spectrometry (ASMS)

- Suited for any soluble target Protein/RNA/DNA
- Seeking novel pocket or MOA

Hit Confirmation

Biophysical Panel

- Over 10 biophysical methods available
- Affinity, thermodynamics, stoichiometry, kinetics, thermal & chemical stability, aggregation

Biochemical Panel

- Enzymatic kinetics, receptor binding kinetics & more
- Luminescence, Fluorescent, TR-FRET, FRET, LANCE, LC/MS, AlphaScreen, Absorbance

Mass Spectrometry

- LCMS, RapidFire HT-MS and ASMS

Structural Biology

- X-Ray crystallography, Cryo-EM, NMR

Cell-based Panel

- AlphaScreen, Luminescence, HTRF, FLIPR
- Reporter gene assay (Luciferase, β -lac, GFP, β -gal, qPCR, etc.)
- Flow cytometry
- Cell line development, cell bank, primary cells & tissues

High Content & Multiplexing Assays

- Cell imaging and kinetic monitoring for a wide range of phenotypic assays in a quantitative and high throughput mode

WuXi AppTec TARGET-TO-HIT SOLUTIONS

- WuXi AppTec Discovery Biology provides comprehensive customer services covering the entire target-to-hit platform: protein engineering and production, HTS, ASMS, DEL- and fragment-based screening (FBDD), and hit validation (biophysical, biochemical, and cell-based panels, structure-based drug discovery).
- Discovery Biology has 6 operational sites in China, Germany, and the U.S. and employs more than 1000 skilled scientists to ensure timely delivery of high-quality data.

PROTEIN SCIENCE & PRODUCTION

All Target Classes and Challenging Proteins



More information on stocked
proteins under **ProTgo**

Cancer and Inflammation
ATM, AMPK, NEK7, PIK3C, ROR1, SRC, ULK1, WEE1, NLRP3

Membrane Proteins / GPCRs
Glucose transporter, P2X3, GPR40, CNR1, β 2AR...

DNA Damage Response
ATM, ATR/ATRIP, CHK1, CHK2, CDKs and cyclins ...

Neurodegeneration
BACE1, PDE, NFE2L2, PTPN1, MAO-B, NTRK1, JNKs...

RNA/DNA Mod. Proteins
Cas9, FEN1, EME1, RIG-I, SND1, WRN, SMARCA2...

Epigenetic Targets
BRD2, BAZ1A, CREBBP, SIRTuins, HDACs, EHMT1...

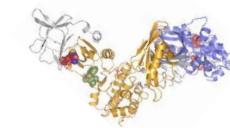
Immune System
cGAS, STING, IL1, ILRL1, MMPs, STATs, antibodies...

Over
1500
Proteins
Produced

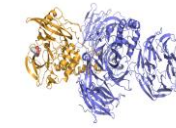
1200
Assay Grade
Proteins (verified for
biophysical
methods)

>250
Crystallization
Grade Proteins
(verified
crystallization
protocols)

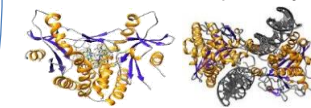
Protein Complexes
AMPK – AMP activated protein kinase



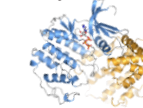
Protein Degradation
E3 ligase – CRBN/DDB1



Immune Therapy / Rare Diseases
STING/ cGas - pathway



Cell Cycle Regulation
CDK2-Cyclin A Kinase



Membrane Proteins / GPCRs
P2X3-ATP-gated ion channel, CNR1, GPR40, Glucose transporter...

RNA/DNA Modifying Proteins
SMARCA2 – chromatin remodeling / DDX58 – RNA helicase...

BIOPHYSICAL & BIOCHEMICAL PLATFORMS

Broadest Technologies Suit for Hit-finding Globally

	SPR	MST	Dianthus	ITC	DSF/ nanoDSF	MS	HTRF/ TR-FRET	DLS	FP	NMR
Binding										
Thermodynamics										
Stoichiometry										
Protein Quality										
Kinetics										
Function										



**Biacore™
8K/8K+ SPR**

Kinetic characterization
& HTS



**Monolith NT
Automated MST**

Binding
characterization &
HTS



**Dianthus PicoDuo
TRIC/Spectral Shift**

Binding
characterization &
HTS



**Prometheus Panta
nanoDSF/DLS**

Thermal Stability
Chemical Stability
Aggregation



**Monolith X
Spectral Shift**

Measure Spectral
Shift and MST
simultaneously



**Q-TOF LC/MS
RapidFire**

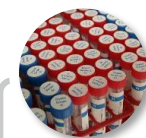
Intact Mass
Peptide Fingerprinting
Covalent Screen

STRUCTURAL BIOLOGY

X-Ray Crystallography



Crystal grade
protein
production



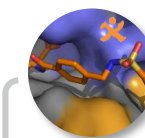
Screening of
myriad
crystallization
conditions



Fine-tuning of
crystallization
conditions to grow well
diffracting crystals



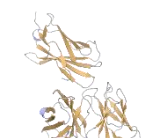
Preparation of
crystals for
collection of X-ray
diffraction data



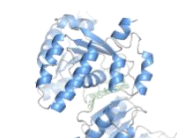
Data processing,
structure solution
and refinement



XPRESS Portfolio
established crystallization
conditions



Fab-antigen
complexes

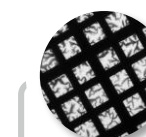


WRN,
Inhibitor bound

Cryo-EM



Cryo-EM grade
protein
production



EM feasibility
analysis
(negative
staining EM)



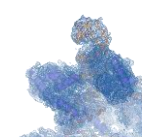
Cryo-EM
conditions
optimization



Cryo-EM
imaging



Data processing
structure solution



SluCas9 and sRGN Ternary Complexes
Nuclease-RNA-dsDNA

