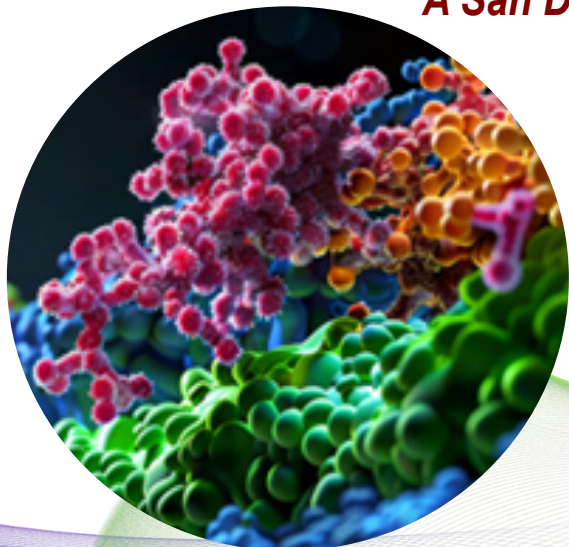


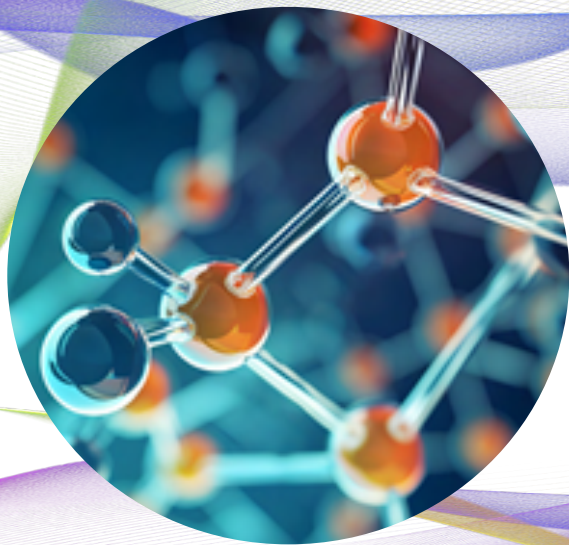


Aurora Biolabs

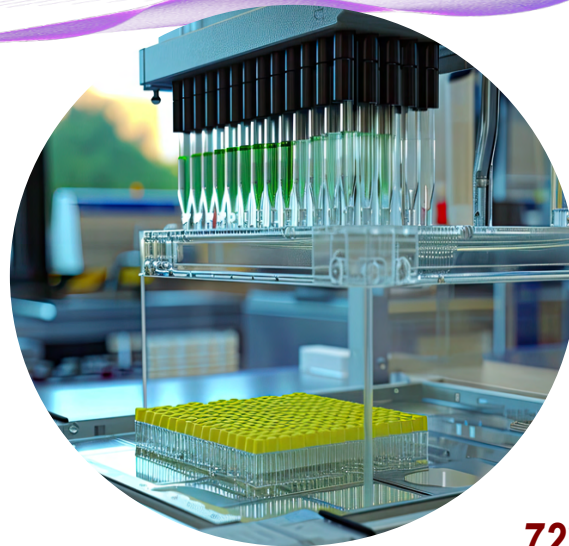
A San Diego CA Biotech Company



Recombinant Proteins



Assay Kits

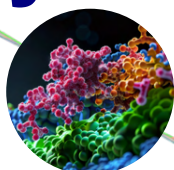


1-Stop Services

7270 Trade Street, Suite 103, San Diego, CA 92121

Crystallography-Grade

High Purity
High Activity



High Consistency
High Stability

Recombinant Proteins

Aurora Biolabs, a Structure Based Design, Inc. subsidiary, is ISO 17025 certified. We manufacture all our recombinant products in our state-of-the-art, well-equipped facility in sunny San Diego, CA. We have decades of experience in manufacturing recombinant proteins for X-ray crystallography/CryoEM drug discovery applications.

Protein Synthesis Capacity: Micrograms to Grams, 50AA to 1000AA.

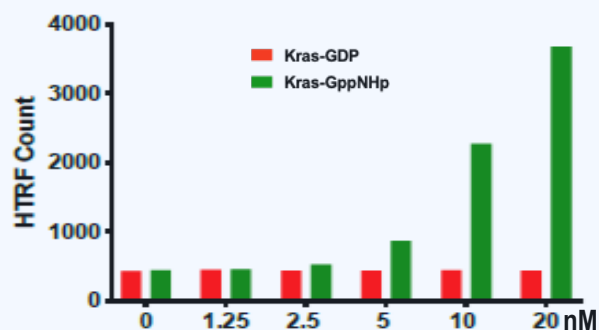
Expression Systems: *E. coli*, Insect Cell, Mammalian Cell (Transient/Stable), Lentivirus.

Available Protein Formulations: Lyophilized, Ready-to-Use, Carrier-Free, Animal-Free.

Our Recombinant Proteins Are Known For:

- Batch-to-Batch Consistency
- Stringent Quality Control Tests
- Protein Purity: >95%, >98%, >99%
- Bioactivity: ED50 = 0.1-1.0 ng/mL
- Endotoxin: <1 EU or <0.1 ng/mL (LAL method)
- Mycoplasma Free

Kras (G12D)-cRAF Binding



Cataloged Recombinant Proteins

Cataloged Drug Target Proteins:

Kras WT, Kras mutants G12C, G12D, G12R, G12V, G13D with GDP or GppNHp loaded, SOS1, cRAF, CDKs, PKM2, EIF4E, MNK2, Bcl2, DNA Polymerase Theta (POLQ), PKMYT1, and More.

Cataloged Cytokines/Growth Factors:

bFGF, aFGF, VEGF, and More.

Cataloged LIF, SHH, ME Proteins:

Human Leukemia Inhibitory Factor (LIF), Mouse LIF, Human Sonic Hedgehog (SHH), Malic enzyme 1 (ME1), ME2, ME3, and More.

Cataloged Tag Removal Proteases:

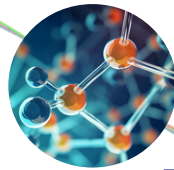
TEV, SUMO Protease (Ulp1), PreScission Protease (HRV 3C), and YopH.

Cataloged SARS-CoV-2 Proteins:

Mpro/3CL, PLpro/NSP3, Helicase/NSP13, NSP7, and NSP8.

Fluorescence

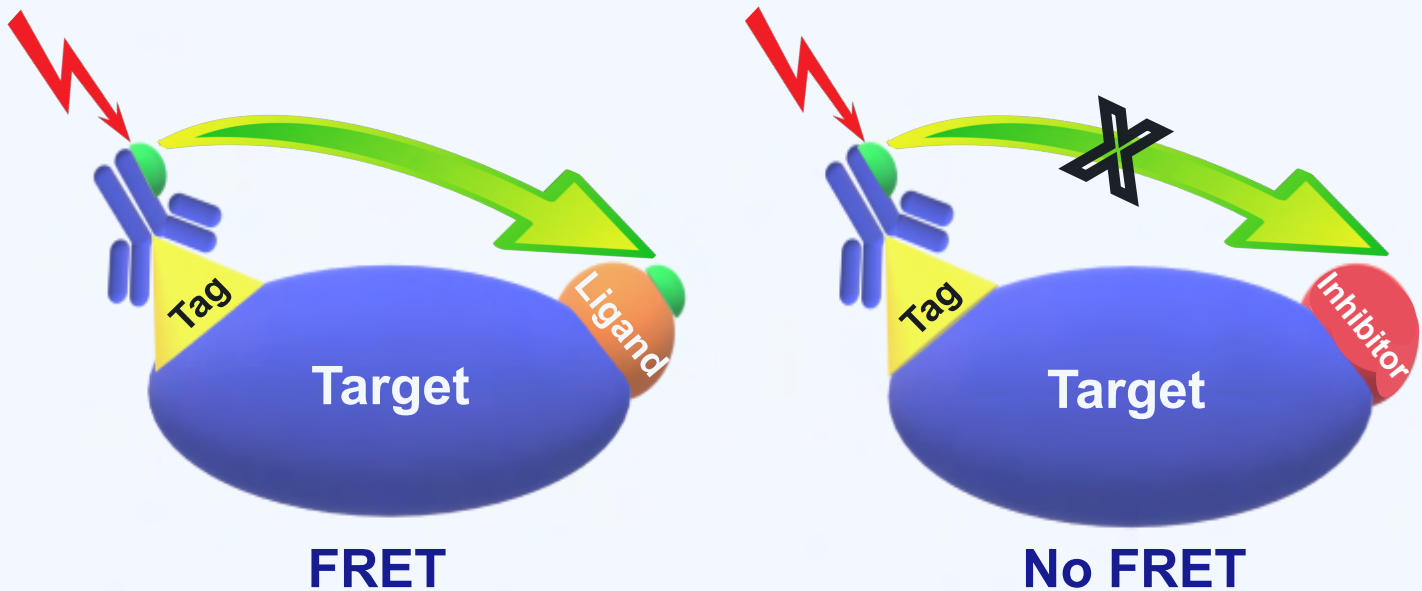
Convenient
Time-Saving



Sensitive
Accurate

Assay Kits

Most of Aurora Biolabs' assay kits are HT Time-Resolved Fluorescence Resonance Energy Transfer (TR-FRET) assays. TR-FRET assays are convenient, fast, sensitive and highly quantitative. They are routinely used in drug target-inhibitor screening.



Cataloged Assay Kits

Kras (WT/G12C/G12D/G12V/G12R)
Nucleotide Exchange Assay Kit
(400, 4000 reactions)

Kras (WT/G12C/G12D/G12V/G12R)
cRAF Binding Assay Kit
(400, 4000 reactions)

DNA Polymerase Theta Activity Assay Kit
(96, 384 reactions)

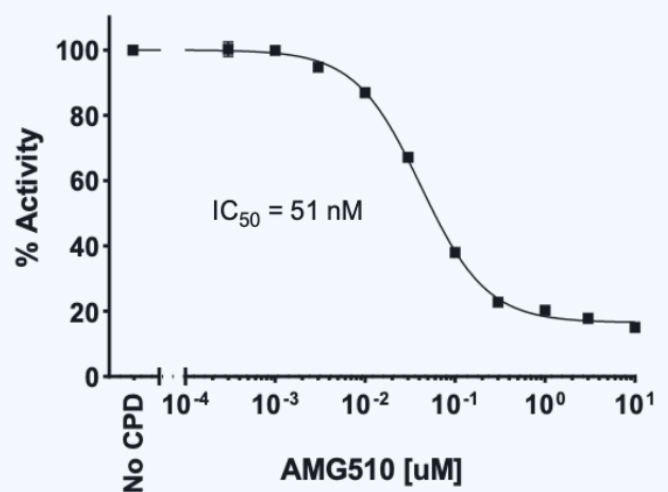
CDK2/CyclinA2 Assay Kit

WEE1/PKMYT1 Binding Assay Kit

eIF4E/eIF4G Binding Assay Kit

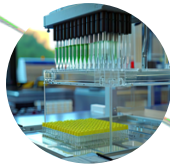
SARS-CoV-2 Mpro/PLpro Assay Kit

Kras (G12C)-Nucleotide Exchange



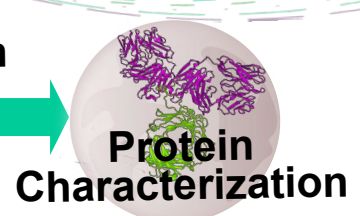
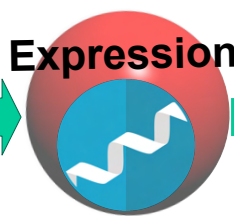
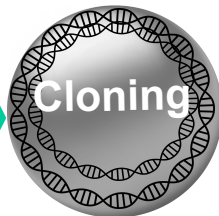
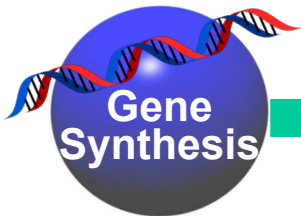
One-Stop

Cost-Effective
Expedient



Expert
Experienced

Services



Proven Compound Screening Services With 150,000+ Compounds

Library	Compounds
Chembridge	40,000
Maybridge	14,080
LifeChemicals	28,160
Enamine 1	10,240
Enamine 2	20,160
NANOSYN	31,365
Selleckchem	1,585

Assay Development & Service Menu

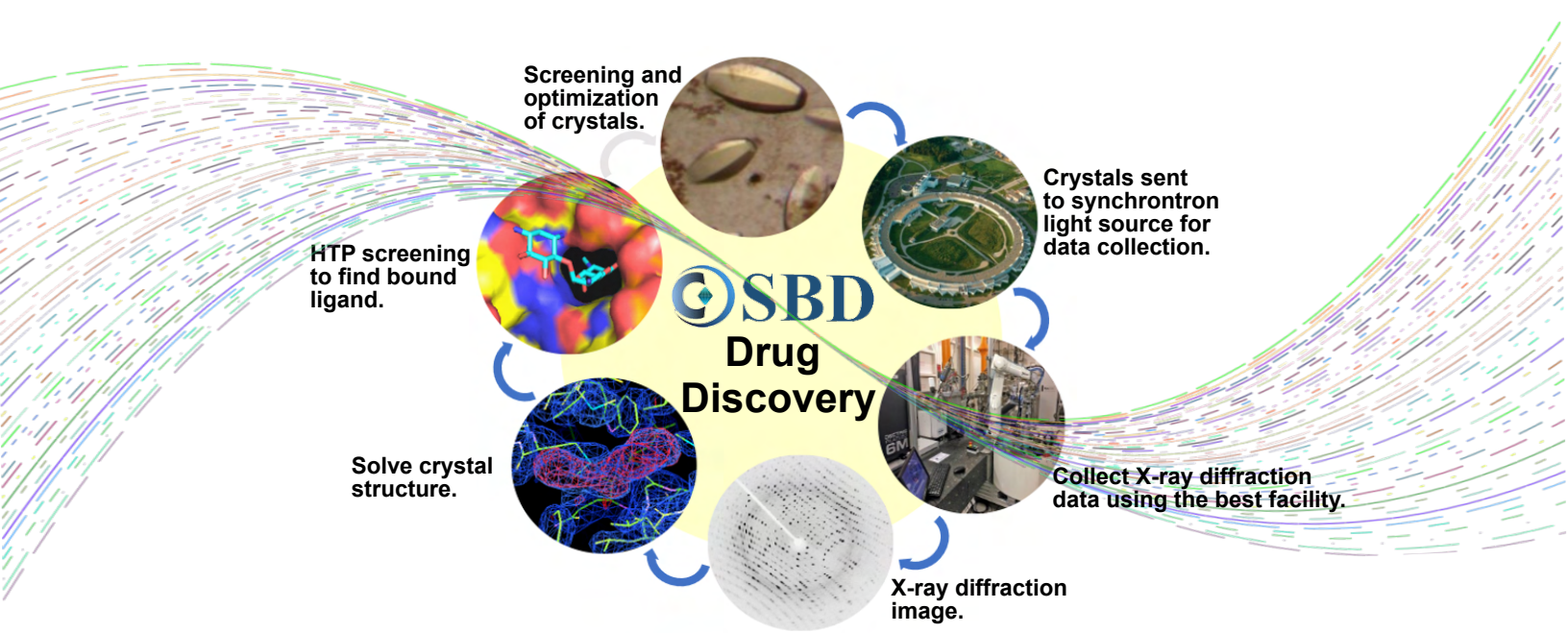
- ✓ Biochemical Assays
- ✓ Cell-Based Assays
- ✓ Kras Assays
- ✓ Kinase Assays
- ✓ TR-FRET Assays
- ✓ ADP-Glo Assays
- ✓ Custom Assays
- ✓ Fluorescence Polarization Assays
- ✓ SPR Binding Assays
- ✓ X-ray/CryoEM Crystal Structure Determination & Analysis

Customization

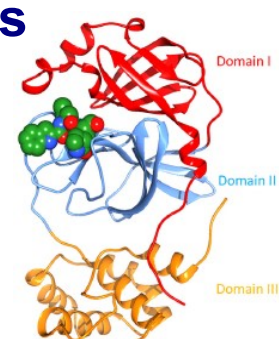
We customize services & products based on your project needs and objectives. We provide free on-site/virtual project meeting and consultation.

Past Client Examples



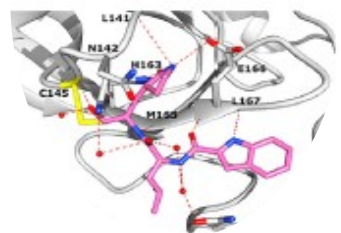


1-Stop Crystal Structure & Co-Crystal Structure of Drug Target/Compound Services



Proven Fragment-Based Screening Services

	SBD FBDD	Conventional HTS
Library Size	1×10^3	1×10^6
M.W.(Da.)	100-300	500-1000
Hit Rate	3-5%	$\lll 1\%$
Initial Hits	$\mu\text{M} - \text{mM}$	$\text{nM} - \mu\text{M}$



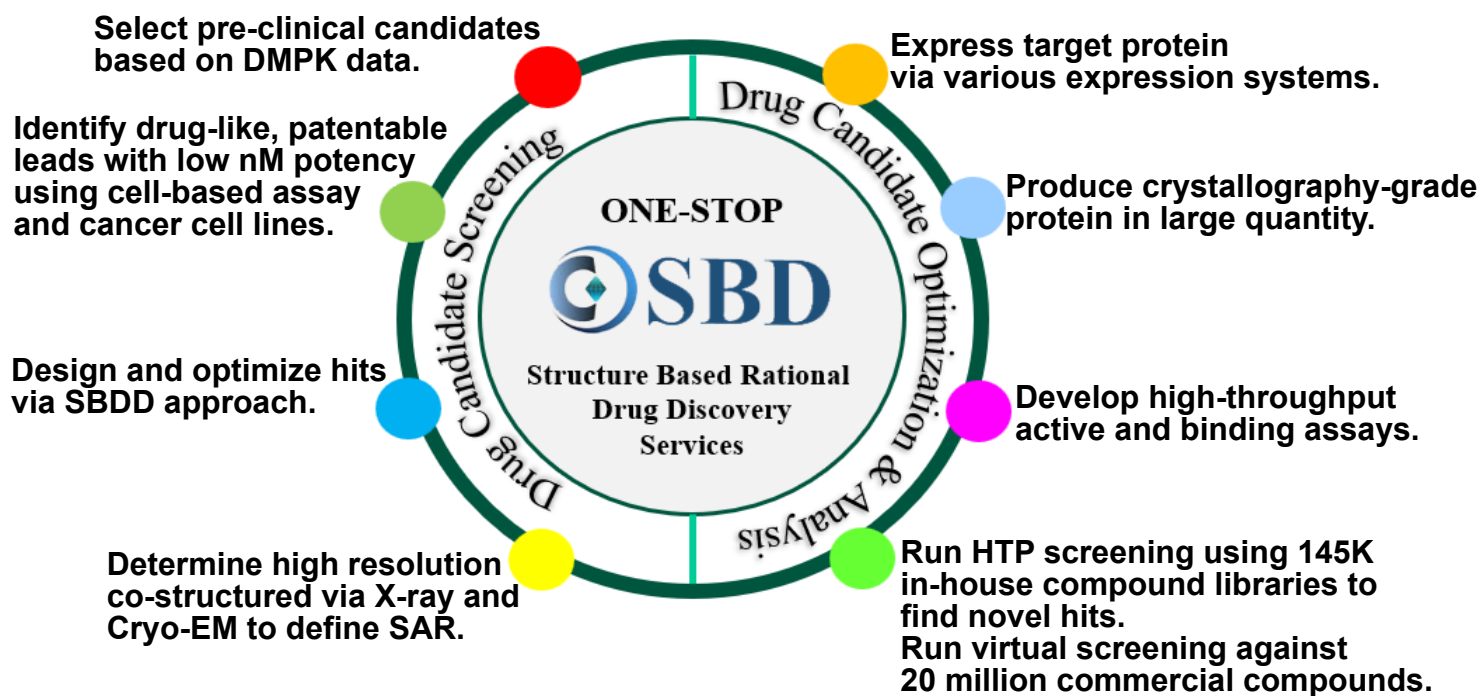
Stanford Synchrotron Radiation Laboratory
A national user facility for academia, industry, and national laboratories



Argonne
NATIONAL LABORATORY

Proven Assay Development & Compound Screening Services

Library Name	Plate#	Master Plate Storage Concentration (mM)	Number of Compounds
Chembridge	500	10	40000
Maybridge	44	10	14080
LifeChemicals	88	10	28160
Enamine 1	32	10	10240
Enamine 2	63	10	20160
NANOSYN	90	5	31365
Selleckchem	6	10	1585



Select Publications Contributed by SBD Services

- Wang et al. Identification of **MRTX1133**, a Noncovalent, Potent, and Selective KRASG12D Inhibitor. *J Med Chem.* 2022 Feb 24;65(4):3123-3133. (Mirati Therapeutics, first-in-class, clinical phase II)
- Mao et al. **Olgotrelvir**, A Dual Inhibitor of SARS-CoV-2 Mpro and Cathepsin L, as a Stand-alone Antiviral Oral Intervention Candidate for COVID-19. *Med.* 2024 Jan 12;5(1):42-61. (clinical phase III)
- Reich et al. Structure-based Design of **Pyridone-Aminal eFT508** Targeting Dysregulated Translation by Selective Mitogen-activated Protein Kinase Interacting Kinases 1 and 2 (MNK1/2) Inhibition. *J Med Chem.* 2018 Apr 26;61(8):3516-3540. (first-in-class, clinical phase II)
- Lack et al. Targeting the **Binding Function 3 (BF3)** Site of the Human Androgen Receptor Through Virtual Screening. *J Med Chem.* 2011 Dec 22;54(24):8563-73. (first-in-class, academic research)