



SMALL MOLECULE EXPONENTIAL DISCOVERY

Screen to Lead, X-Chem is the Partner You
Need to **Unlock Exponential Possibilities**

X-CHEM
TAKE THE LEAD. DRIVE DISCOVERY.

DEL-Driven Drug Discovery With Proven Success for Tough Targets

X-Chem is the partner that empowers you to rapidly screen billions of drug-like compounds against your target with our groundbreaking DNA-encoded library (DEL) screening platform. Because our experts pioneered DEL-driven drug discovery, we can help you leverage our market-leading platform and profoundly diverse chemical libraries with unprecedented speed and clarity.

Working with a variety of clients, including 10 of the top 20 pharma companies, our success rate in identifying functional hits against challenging targets is 80%. The versatile X-Chem drug discovery engine has identified potent hits in 30+ target classes. These compounds blend desired selectivities and modes of action with attractive physicochemical properties. We have licensed 85+ programs with anticipated expansion year over year.

Whether you choose a **partnership or project-based model**, we will help you leverage our platform, technology and expertise to stock your drug discovery pipeline with molecules that hold enormous potential.

Are you a dedicated **DEL practitioner or an investigator** looking for equity against a novel target? We will help you leverage our platform, technology and expertise in the most effective way possible.



Why Choose X-Chem?

Our time-tested DEL platform builds drug discovery pipelines and libraries that accelerate lead generation.

Because we have focused on molecular properties, developability and atom economy, our libraries produce selective, ligand-efficient, novel lead structures that advance quickly through the medicinal chemistry stage.

X-Chem Excels With High-Value Target Classes

- › Protein-protein interactions (PPI)
- › Bacterial targets
- › Ubiquitin ligases
- › Epigenetic targets
- › G protein-coupled receptors (GPCR)

But the proof is in the numbers:



X-Chem's Rapid Pathway Screen to Lead

DEL Technology
& Enabling
Services

Hit Identification

Hit-to-Lead

Lead
Optimization

Candidate
Selection

Technology Services & Reagent Generation

- Protein Science*
- DEL Tractability
- Library Design
- Library Synthesis

PartnerDEX & OpenDEX Screening

- Purified Protein or Cell Lysate
- Lead-Like, Drug-Like, Covalent & Macrocyclic Libraries
- Selection Data Analysis
- Data Visualization & Clustering
- Hit Confirmation & SAR

Chemistry

- Program Management
- Medicinal Chemistry
- Computational Chemistry
- Synthetic Chemistry
- Analytical Chemistry
- Process Development & Scale-Up

Biosciences

- Screening Cascade Design
- Assay Development
- Biochemical Assays
- Biophysical Assays
- Cell Based Assays*
- DMPK/ADME*

Structural Biology*

- Crystallography
- CryoEM

*Partnered Services

Benefits of DEL over HTS?

When we attach compounds to DNA identifiers, we turn the conventional screening paradigm on its head. Rather than screening compounds one at a time as in HTS, we can screen them as a mixture. DEL enables us to rapidly screen libraries of virtually unlimited size in a handful of wells.

Through our DEL discovery services, from hit screening and validation through lead optimization, you can:

- › Identify high-value leads significantly faster than with other methods.
- › Succeed with targets that are intractable for most other hit discovery technologies.
- › Obtain drug-like small molecule compounds from the library.
- › Generate orthosteric or allosteric ligands with novel mechanisms of action.
- › Dial in exquisite selectivity.
- › Access SAR data and move ahead with hit-to-lead development.

**SCREENS BILLIONS
OF COMPOUNDS
SIMULTANEOUSLY**

**EXPONENTIALLY
MORE DIVERSE
LIBRARY**

Keep Moving Forward from Hit to Lead

Our lead optimization services enable clients to quickly push their compounds forward for even higher quality outputs. Benefit from our expertise in medicinal chemistry, custom synthesis and scale-up process chemistry. We support all aspects of drug discovery, from lead optimization through candidate identification.

“Our drug discovery research will be further enhanced through X-Chem’s breakthrough technology.”

- Otsuka

A Flexible, Inclusive Range of Service Models:



DEL Driven Hit
Identification



Hit-to-Lead



Lead Optimization



DEL Technology and
Enabling Services



TAKE THE LEAD. DRIVE DISCOVERY.

X-Chem Is the Partner You Need to Unlock Exponential Possibilities in Your Small Molecule Drug Discovery.

TALK TO US

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