



Custom Libraries

Get the most from your existing chemistry resources and discover meaningful hits that **accelerate your drug discovery.**

Realize the Full Potential of Your Chemistry Resources With X-Chem's Custom Library Platforms

DNA-encoded library (DEL) technology is increasingly becoming a mature and prominent approach to early-stage drug discovery. In contrast to conventional high-throughput screening approaches, DEL screening simultaneously interrogates billions of compounds in a single assay. X-Chem's Custom Library Services help drug developers more quickly and efficiently discover molecules which will improve human health.

X-Chem has spent years building the world's leading collection of DELs. But even our libraries do not represent the full potential of the DEL platform. Many of our partners possess collections of proprietary building blocks and scaffolds which are unavailable to outside researchers and third parties. X-Chem's Custom Library Service offering is an ideal approach to tap the full wealth of corporate chemistry resources.

In Custom Library Service projects, X-Chem prepares proprietary DELs using our partners' materials, design criteria and know-how. Whether based on a privileged scaffold or utilizing an investment in proprietary building blocks, custom DELs leverage our partners' chemical equity to provide libraries with differentiated chemical diversity and/or target class bias. X-Chem has rich experience turning our partners' ideas into practical and efficient schemes, and then executing them in our labs. Because these libraries are proprietary to our partners, they can rest assured that they have exclusive access to this rich source of chemical diversity.

Particularly at mature pharmaceutical companies, the accumulated chemical materials from past programs represent a valuable, but difficult to exploit, investment in bioactive chemistry. One of the attractive features of DEL technology is the miniaturized scale of the screening experiment and the library synthesis. Therefore, even minuscule amounts of building blocks, as little as 1 milligram, can be sufficient for incorporation into a custom DEL. Legacy reagents and intermediates from past medicinal chemistry projects, while in inadequate amounts to support conventional array synthesis, can now find utility in the DEL paradigm.

CUSTOM LIBRARIES – AN X-CHEM ADVANTAGE

- › Benefit from our latest library designs and X-Chem's immense DEL knowledge
- › Proven success for various target classes
- › Our DEL expertise united with your proprietary chemistry can lead to breakthroughs with the most intractable targets
- › Access both X-Chem's DEL library collection and your exclusive chemical equity
- › We help you turn your ideas into practical and efficient solutions
- › Develop efficient and atom economical custom libraries to fast-track your lead generation strategy

Expert Insights to Meaningful Hits for All Target Types

X-Chem's powerful DEL technology can bring a paradigm shift to your drug discovery program. X-Chem pioneered DEL chemistry development and execution. Our scientists advise our partners on the best synthetic reactions to exploit, the most diverse building block sets to utilize and the optimal approach for formatting proprietary reagents for DEL synthesis. Whether you want to access X-Chem's atom-efficient library schemes with your building blocks or design an entirely new DEL using in-house knowledge, X-Chem experts are there every step of the way to ensure the production of the highest quality DEL. Have ideas for a DEL to accelerate your drug discovery efforts? Reach out to the leaders in DEL synthesis at X-Chem.

Full-service Custom Library Platform

- › Access X-Chem's exceptionally large DEL library collection
- › Leverage your own proprietary chemistries alongside X-Chem's
- › Our miniaturized scale of screening saves reagents and lowers the cost of drug discovery
- › Atom efficient custom library schemes for a wide range of targets
- › Exclusive license to hit compounds
- › Flexible screening models with broad collaboration and technology transfer options

X-Chem is the partner you need to unlock exponential possibilities in your small molecule drug discovery.

Find Your Next Drug Molecule With X-Chem

ABOUT X-CHEM

X-Chem, Inc. is the leader in small molecule discovery science, providing pharmaceutical and biotech companies a complete, seamless solution for screening, hit validation and lead optimization. As pioneers of DNA-encoded chemical library (DEL) technology, the company leverages its market-leading DEL platform to discover novel small molecule leads against challenging, high-value therapeutic targets. In-house lead optimization services enable clients to progress their compounds directly for even higher quality outputs. Our expertise in medicinal chemistry, custom synthesis and scale-up process chemistry enables us to support all aspects of drug discovery, supporting lead optimization through candidate identification.