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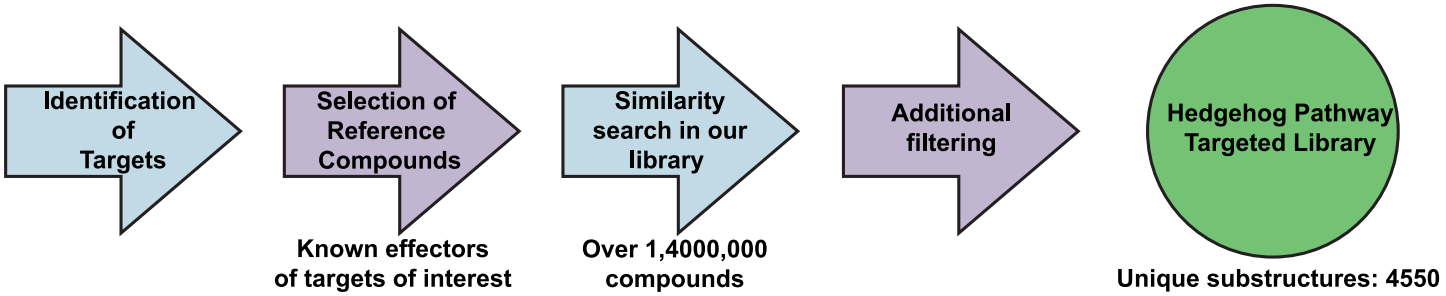
HPPMARK

Hedgehog Pathway Targeted Library

The Hedgehog signaling pathway, essential for embryonic development and tissue maintenance, becomes dangerously dysregulated in cancers like medulloblastoma and basal cell carcinoma when its key proteins are mutated or overactive. While current Hedgehog pathway's inhibitors show clinical success, their utility is limited by drug resistance, tumor recur- rence, and severe side effects from disrupting the pathway in healthy tissues. These challenges underscore the urgent need for next-generation therapies targeting downstream components like GLI transcription factors or alternative regulatory nodes, which could overcome resistance while minimizing toxicity. Additionally, modulating Hedgehog pathway's signaling holds promise beyond oncology—for tissue regeneration, fibrosis treatment, and neurological disorders—further emphasiz- ing the importance of developing novel, precise therapeutics. Expanding the drug arsenal against this pathway could trans- form outcomes for resistant cancers and unlock new applications in regenerative medicine.

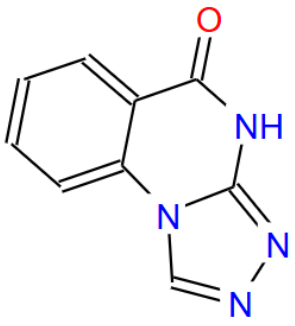


Example Targets:

Smoothened

Patched GLI Transcription Factors

Hedgehog Ligands



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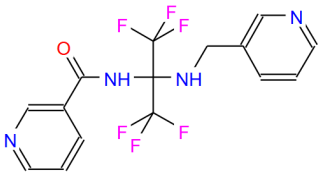

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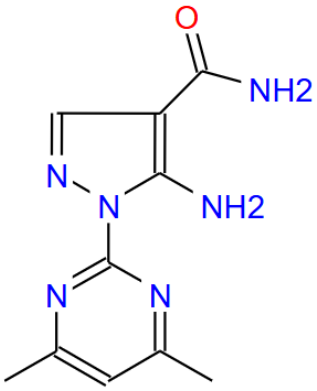
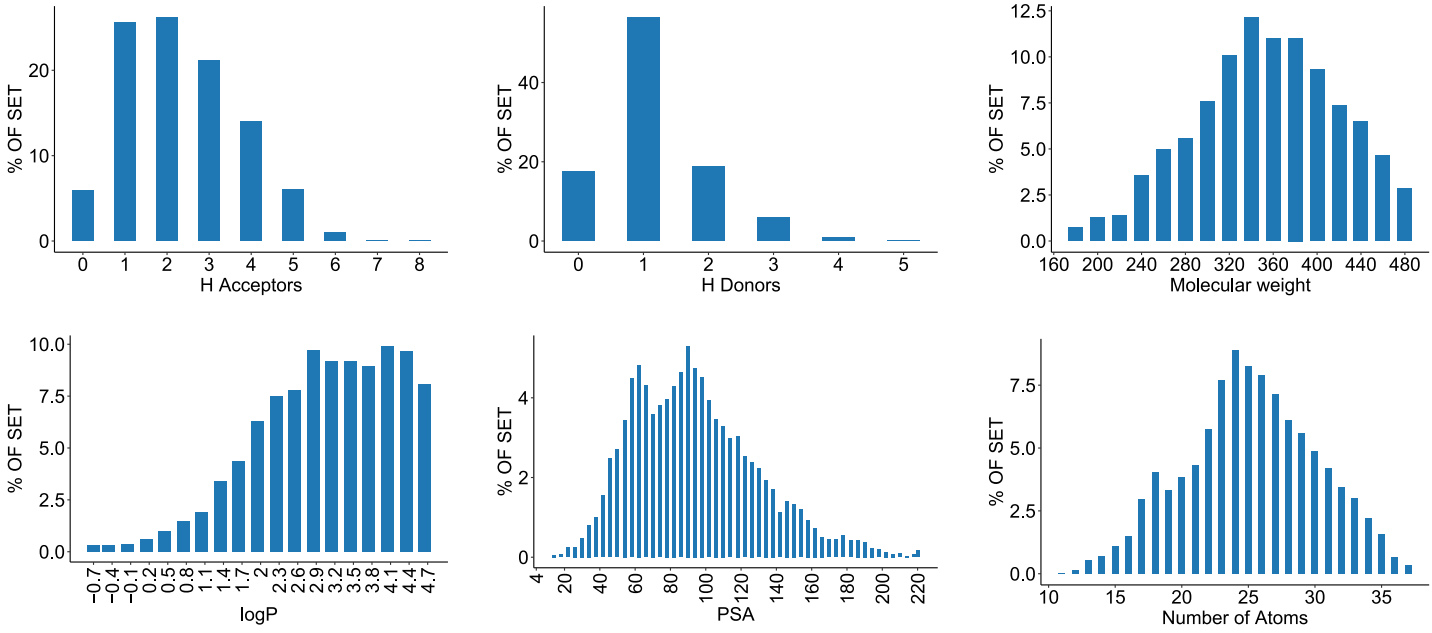


STL373605

Hedgehog Pathway Targeted Library (HPPMARK) consists of compounds that were selected based on similarity to known effectors of Hedgehog pathway proteins. This library was designed to provide a potential starting point or to expand ongoing drug discovery project. It is designed in a way that maximizes structural diversity and excludes problematic compounds. This library has 7811 compounds. All compounds follow RO5.

Distribution of Parameters



If you have any specific needs for your project, we can provide specially tailored compound library based on your request.

Have questions or need a quote? Contact Irina Haywood (Ryabushenko) at
irina@vitasmlab.biz
Let's Connect on LinkedIn! Expand your professional network.

We look forward to collaborating with you!
Empowering Your Research, One Molecule at a Time.