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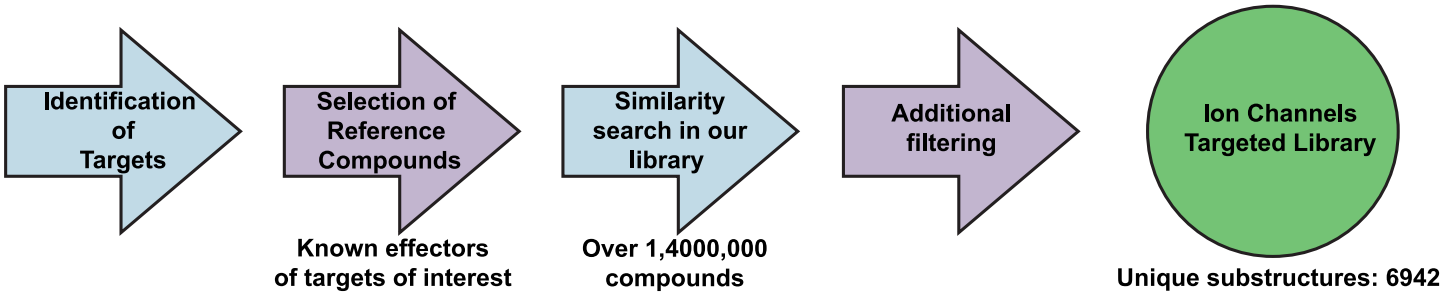
IONMARK

Ion Channels Targeted Library

Ion channels are critical membrane proteins that regulate electrical signaling and ion homeostasis in excitable tissues, including the heart, brain, and muscles. Their dysfunction underlies severe disorders such as cardiac arrhythmias, epilepsy, chronic pain, and cystic fibrosis. While existing ion channel modulators are clinically valuable, many suffer from limited selec- tivity, leading to side effects, or lose efficacy due to compensatory mechanisms in chronic diseases. The need for novel therapeutics is urgent, particularly for refractory conditions like neuropathic pain and drug-resistant epilepsy, where current options fail. Next-generation small molecular drugs could revolutionize treatment by offering greater specificity, reduced off-target effects, and improved management of neurological, cardiovascular, and metabolic disorders, addressing critical gaps in precision medicine and reducing the global burden of channelopathies.

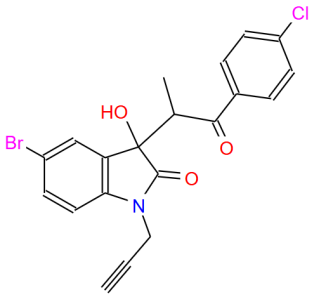


Example Targets:

Ionotropic Glutamate Receptor

ORAI1/STIM1 Complex

HCN Channels



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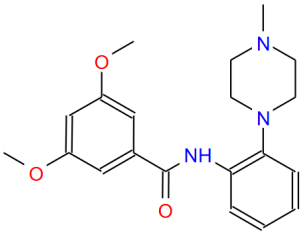

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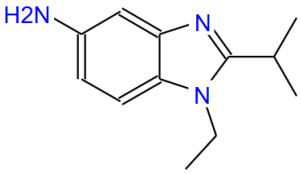
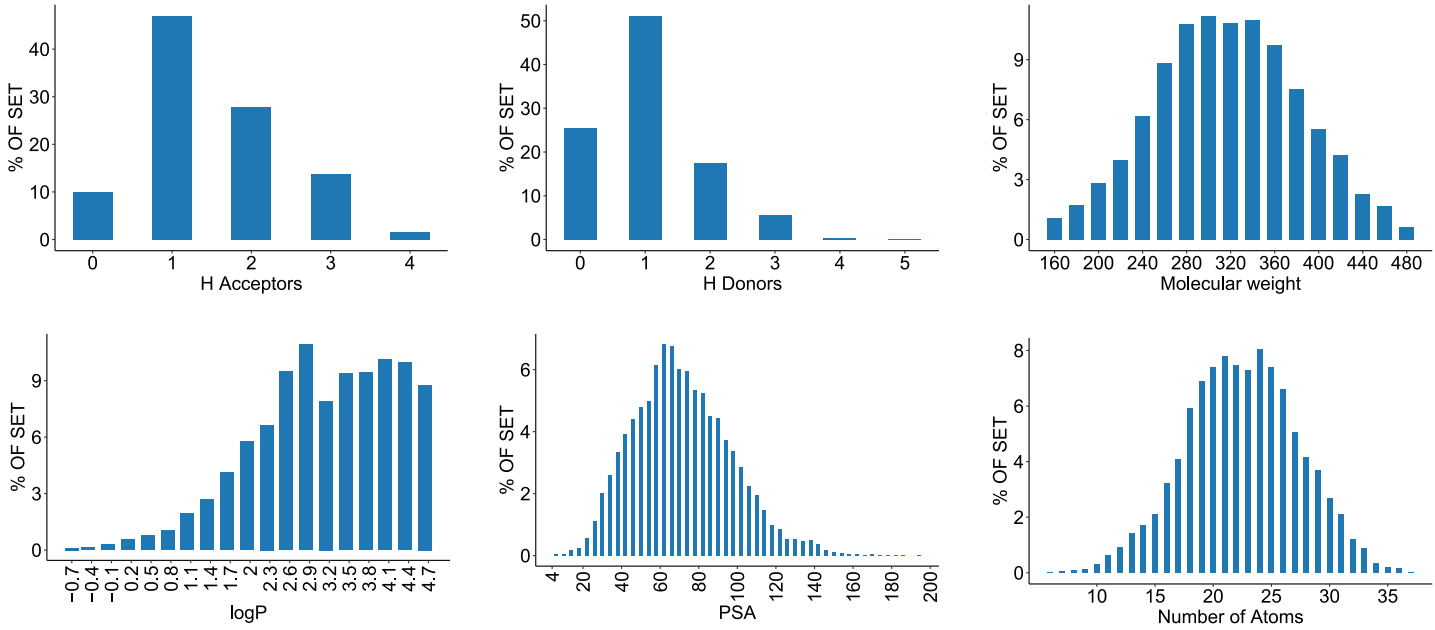


STL259672

Ion Channels Targeted Library (IONMARK) consists of compounds, which were selected based on similarity to known effectors of ion channels 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 13149 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.