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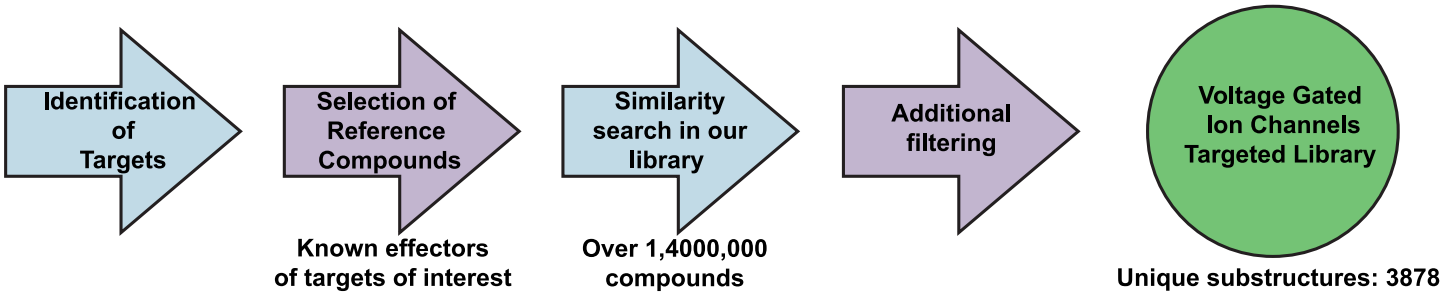
VGICMARK

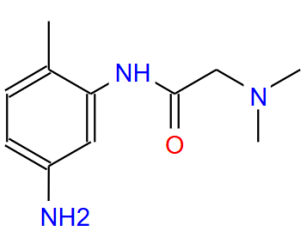
Voltage Gated Ion Channels Targeted Library

Voltage-gated ion channels (VGICs) are crucial for electrical signaling in excitable cells, regulating heartbeat, nerve impuls- es, and muscle contraction. Dysfunctional VGICs underlie numerous disorders, including epilepsy, cardiac arrhythmias, chronic pain, and neurodegenerative diseases. While existing drugs provide symptomatic relief, they often lack specificity, causing side effects, and fail to address disease progression. New advanced therapies based on novel small molecular drugs could improve precision by targeting specific channel subtypes or modulating gating mechanisms rather than simple blockade. Additionally, research suggests VGICs play roles in cancer metastasis and immune regulation, opening new therapeutic avenues. Developing next-generation modulators—with enhanced selectivity and fewer off-target effects—could revolutionize treatment for millions of patients with electrical signaling disorders.



Example Targets:

Voltage-Gated Chloride Channels



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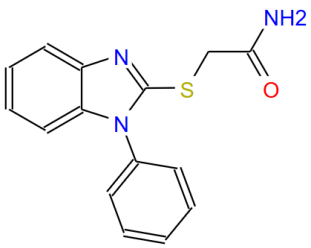

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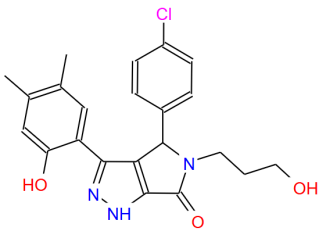
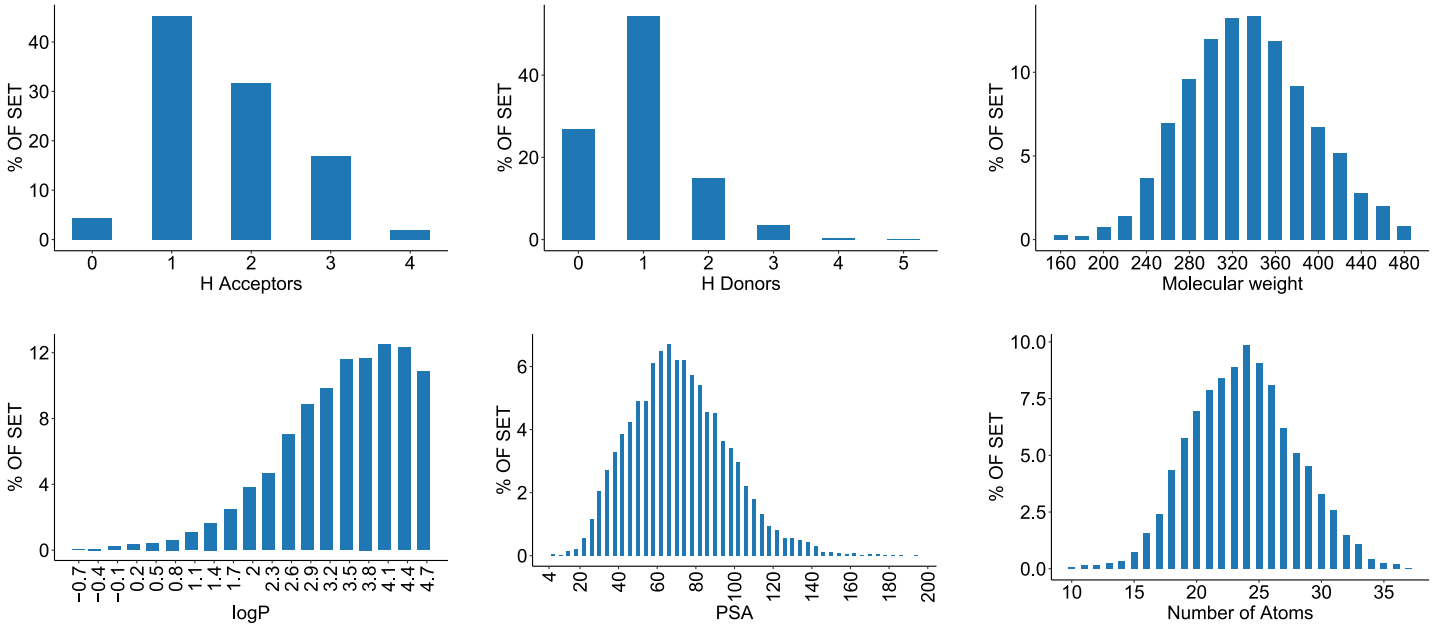


STK908659

Voltage Gated Ion Channels Targeted Library (VGICMARK) consists of compounds with potential activity towards various types of ion channels, which were selected based on similarity to known effectors of VGIC 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 10734 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.