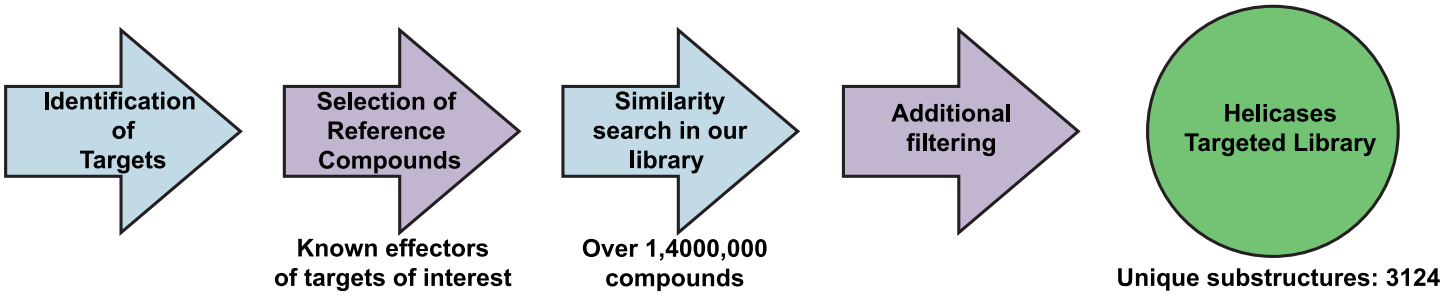
https://vitasmlab.net

HELMARK

Helicases Targeted Library

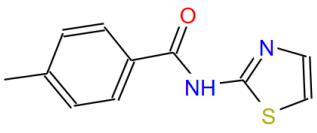
Helicases are essential molecular motors that unwind DNA and RNA, playing critical roles in replication, repair, transcription, and translation. Their dysfunction is linked to cancer, neurodegenerative diseases, and viral infections, making them attrac- tive yet underexploited therapeutic targets. Most human helicases remain untargeted despite their involvement in tumorigen- esis and genetic disorders. The unique ATP-dependent mechanism of helicases offers opportunities for selective interven- tion, particularly in drug-resistant cancers or viral pathogens like SARS-CoV-2 that rely on helicase activity for replication. However, developing helicase-targeted drugs faces challenges, including selectivity and cellular toxicity. Expanding the helicase drug pipeline could yield breakthrough treatments for cancers, viral outbreaks, and rare genetic diseases, address- ing critical gaps in precision medicine.



Example Targets:

NS3 Helicase Bloom Syndrome Helicase Werner Syndrome Helicase

DNA Repair Helicase DEAD-box RNA Helicase



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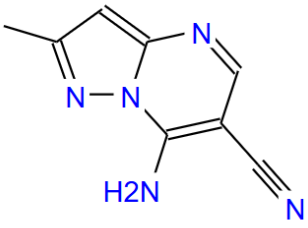

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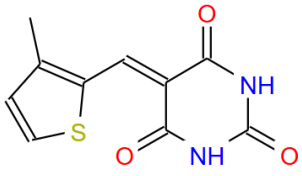
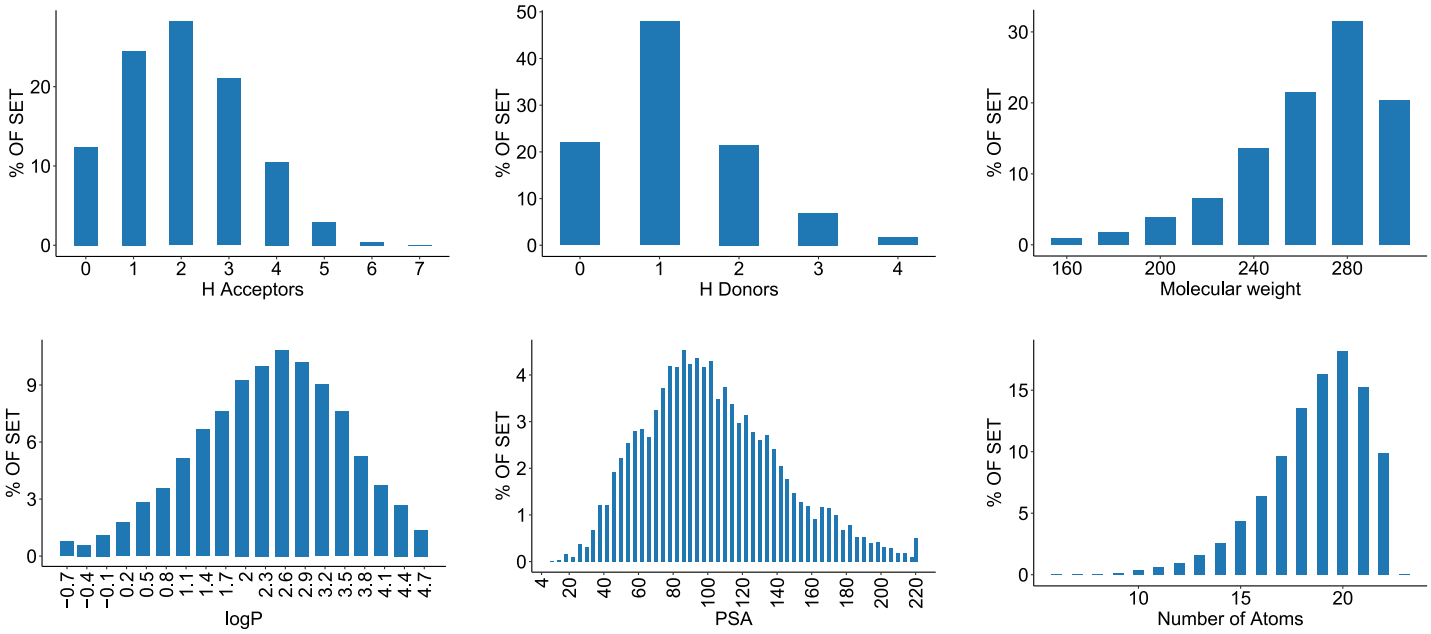


STK025329

Helicases Targeted Library (HELMARK) consists of compounds with potential activity towards helicases, which were select- ed based on similarity to known effectors of prominent helicases. 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 6579 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.