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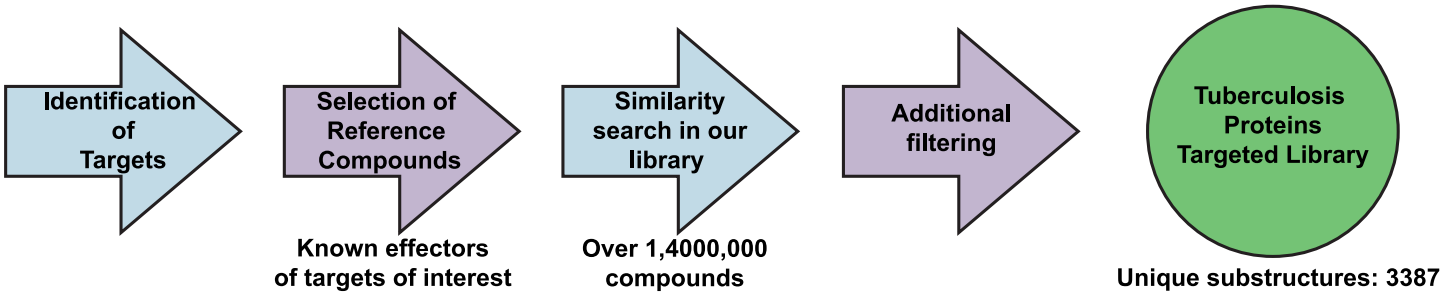
TUBMARK

Tuberculosis Proteins Targeted Library

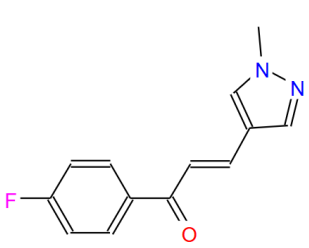
Tuberculosis proteins are essential for the survival, virulence, and persistence of Mycobacterium tuberculosis within the human host. They facilitate cell wall synthesis, nutrient acquisition, immune evasion, and metabolic adaptation, enabling the bacterium to withstand harsh conditions and antibiotic pressure. The global burden of drug-resistant tuberculosis under- scores the critical need for new small molecule drugs. Existing therapies target a limited set of bacterial proteins, and rising multidrug-resistant strains render many treatments ineffective. Novel compounds inhibiting unexplored targets or virulence factors could overcome resistance, shorten treatment duration, and act synergistically with current drugs. The complex biology of TB, including latency and host-pathogen interactions, demands innovative chemical strategies to develop effica- cious, orally bioavailable agents that can tackle both active and dormant infections, ultimately curbing this pandemic.



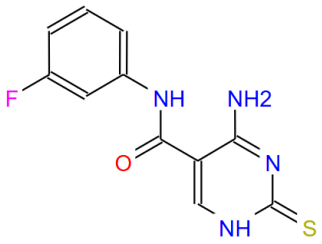
Example Targets:

MmpL3 ATP Synthase

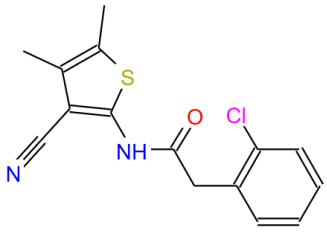
Cyp121



STK306944



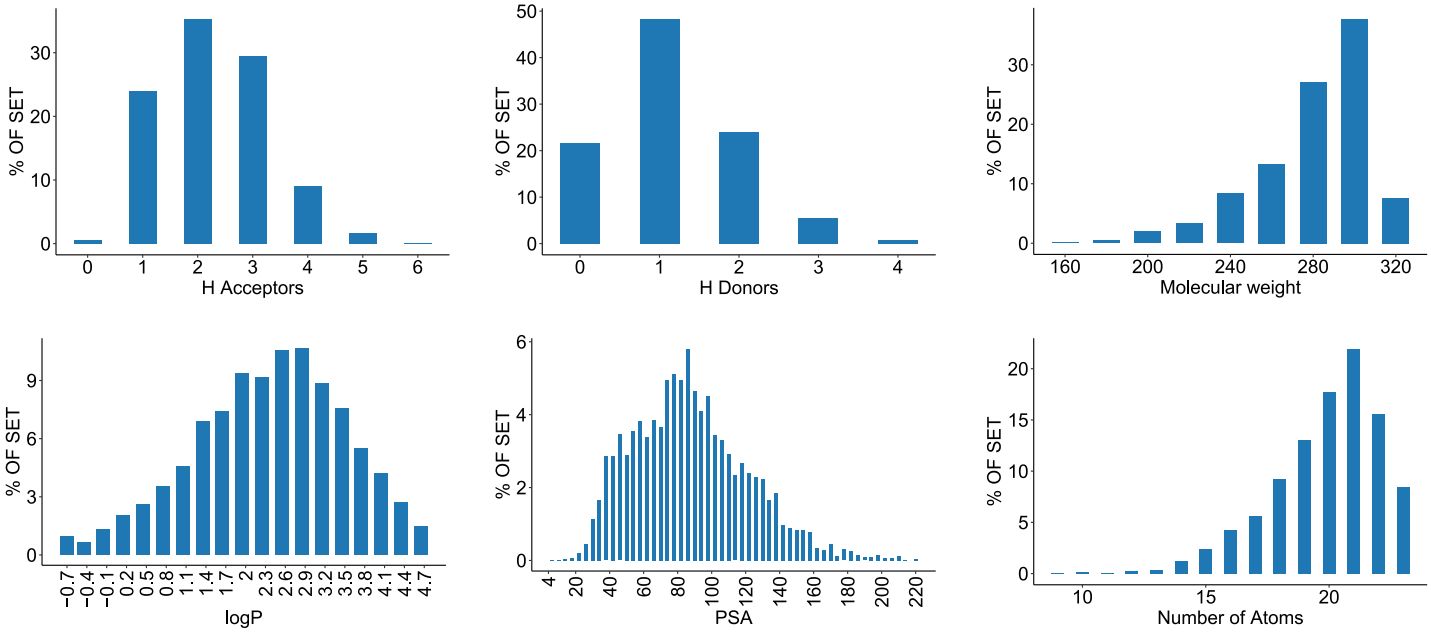
STL072978



STK484587

The Tuberculosis Proteins Targeted Library (TUBMARK) is a collection of 4977 rule-of-five compliant compounds, specifical- ly designed to target key Mycobacterium tuberculosis proteins. Each compound was selected based on structural similarity to known inhibitors of essential targets, ensuring direct biological relevance. The library prioritizes broad structural diversity and optimal drug-like properties while filtering out compounds with undesirable motifs or potential toxicity. TUBMARK provides a robust foundation for high-throughput screening, offering a rich source of novel chemical starting points for devel- oping new therapeutics against drug-sensitive and multidrug-resistant tuberculosis.

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.