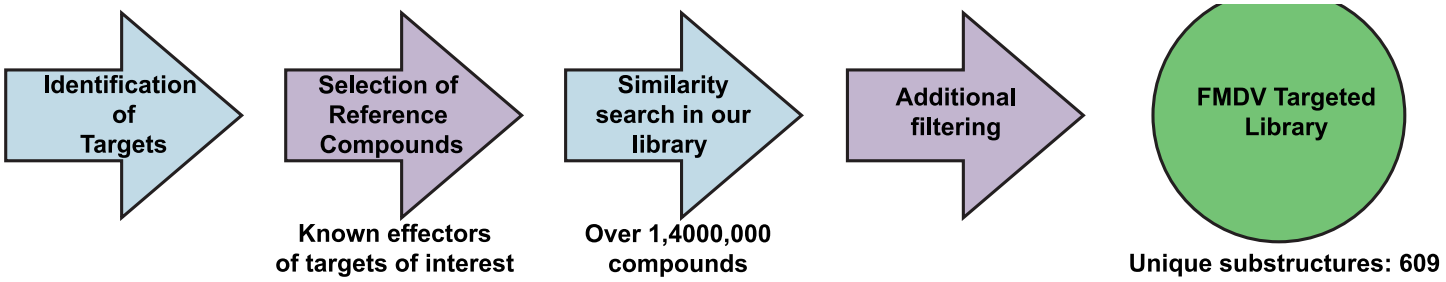
https://vitasmlab.net

FMDVMARK

Foot-and-mouth Disease Virus Targeted Library

The foot-and-mouth disease virus (FMDV), represents a critical threat to global agriculture and food security. This highly contagious pathogen infects cloven-hoofed livestock, and while it is not a direct human health threat, its economic and social impact is staggering. A single outbreak can devastate national livestock industries, with global economic losses estimated at up to $200 billion from trade restrictions and mass animal culling . Currently, the primary method of control relies on vaccina- tion campaigns. However, genetic variability allows the virus to escape immune protection and hinders eradication efforts. This vulnerability highlights the need for new small molecule drugs. Developing antivirals that target specific viral proteins, would provide an essential therapeutic arsenal. Unlike vaccines, which require time to induce immunity, antivirals could be deployed immediately during an outbreak to limit viral spread, reduce the number of animals culled, and help overcome vaccine-resistant strains . The development of such drugs is paramount to safeguarding livestock, ensuring a stable food supply, and protecting the livelihoods of millions of farmers worldwide.

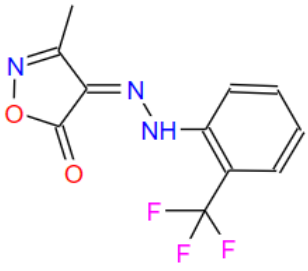


Example Targets:

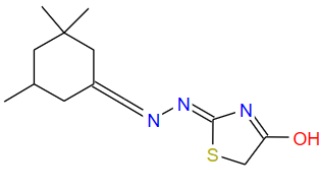
3C Protease

αvβ6 Integrin

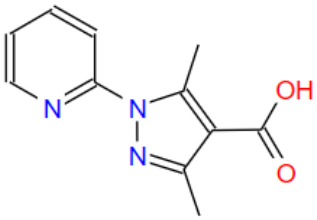
3Dpol



STK329509



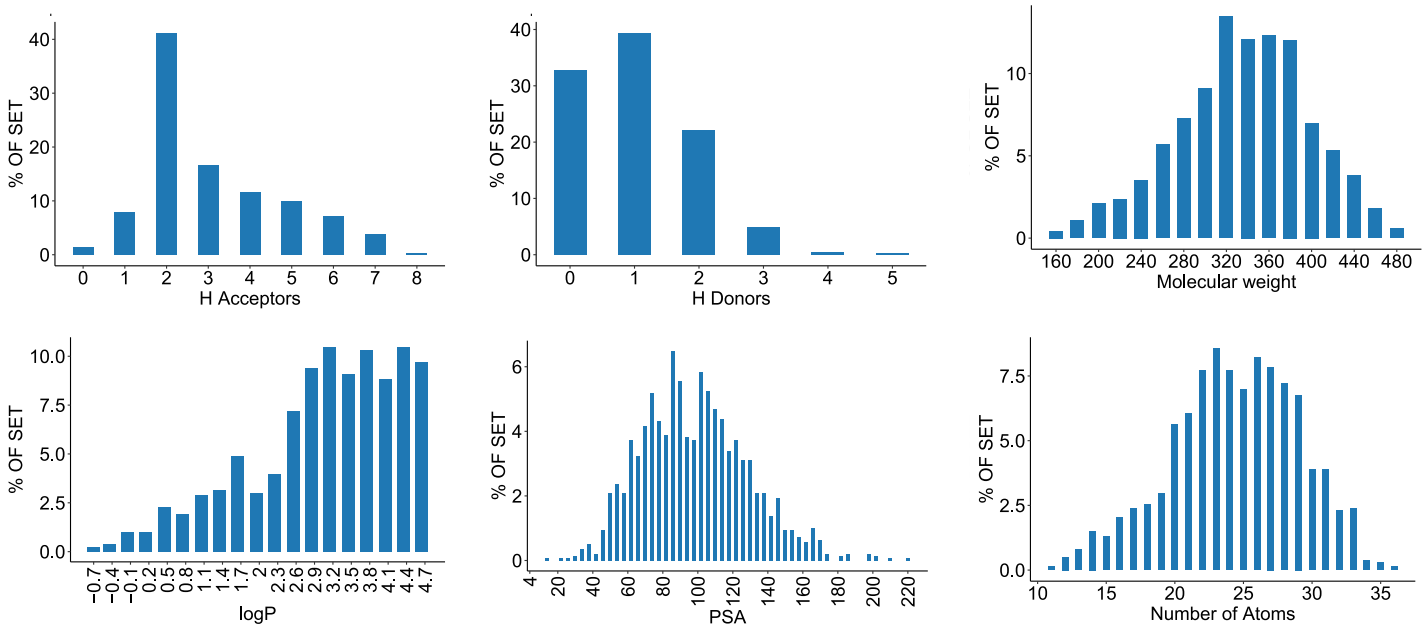
STK647276



STL146853

Foot-and-mouth Disease Virus Targeted Library (FMDVMARK) consists of compounds which were selected based on similarity to known and likely effectors of proteins, associated with FMDV. 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 1389 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.