Covalent Inhibitors

ASINEX

Most compound collections have been created based on the premise of finding molecules which bind to their target through noncovalent interactions. Highly reactive electrophilic and nucleophilic compounds that are able to form covalent bonds with the protein have, therefore, been deliberately avoided mainly due to the risks associated with immunogenic responses. However, recent research has shown that covalent inhibitors may have certain advantages for drug discovery, especially for targets where complete inactivation is required.

Given this recent interest, ASINEX has crafted a unique 1000+ compound set of molecules containing electophylic moieties that could potentially interact with cysteine residues in the target protein. The diversity of represented scaffolds creates multiple opportunities for drug discovery in various target and therapeutic areas such as kinases, proteases, protein-protein interactions, and antimicrobials. Compounds are available in 0.01 mg, 0.1 mg and 1.0 mg/umol copies in 96-well plates (80 compounds a plate).