ASINEX

Glycomimetics

Cyclic amino alcohols and cyclic glycols are the common structural features of carbohydrates and other functional small molecules found in nature. Carbohydrates and their mimics constitute very important protein recognition elements as confirmed by multiple co-crystal structures published in PDB. Analysis of literature data revealed 40 approved carbohydrate-based or carbohydrate-like drugs with 283 distinct mechanisms of action across 50 categories including antineoplastic, antiviral, antibacterial, antifungal, and cardiotonic agents as well as essential vitamins and micronutrients.

ASINEX has developed a robust synthetic technology which allows the efficient construction of synthetic libraries of glycomimetic compounds. These compounds are designed to mimic the favorable binding characteristics of carbohydrates due to the presents of specific pharmacophoric groups and fragments.

The Glycomimetic library exhibits remarkable chemical diversity to provide broad target applicability in modulating GPCRs, protein-protein interactions, ion channels, antibacterial and antiviral targets.

