

Phenotypic Screening Pre-Plated Set

High-throughput technologies for screening large compound collections in various phenotypic assays have been used to discover many pharmacologically active compounds and drugs. Analysis shows that about 40% of the recent first-in-class drugs were discovered through phenotypic screening approaches [1]. Phenotypic screening assays are often based on cellular systems, where cells are probed by various chemical entities to identify the ones that have desirable phenotypic effect. The ability of a small molecule to cross cell membrane is crucial for interrogation of intracellular pathways and targets [2]. In order to address that Asinex has created a diverse set of molecules by applying strict physico-chemical and structural descriptors to ensure good solubility and permeability properties.

MW 200-450

clogP -1.0 – 7.0

clogD (pH 7.4) -5.0 – 4.0

Rot.Bond 0-10

HA 1-10

HD 1-5

TPSA 15-135 A

N+O 2-10

HAC 19-34

Dipole 0.3 – 3.30

SHP2 0.240 – 0.450

Compounds are available in 0.01 mg, 0.1 mg and 1.0 mg/umol copies in 96-well plates (80 compounds a plate).

Reference:

1. Eder J, Sedrani R, Wiesmann C *Nat Rev Drug Discov.* 2014 Aug;13(8):577-87. doi: 10.1038/nrd4336.
2. Wassermann A, Camargo L, Auld D. *Front Pharmacol.* 2014; 5: 164. doi: 10.3389/fphar.2014.00164