

Compound Profiling Services

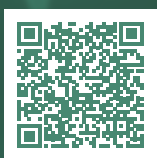
SignalChem Biotech, now part of Sino Biological, boasts one of the largest selections of active enzymes. Leveraging this extensive collection, we offer compound selectivity profiling services to determine the inhibitory profiles and mechanisms of action of drug candidates. This includes obtaining IC50 values and conducting protein kinase assays to evaluate ATP competition.



The SignalChem Advantage

SignalChem offers one of the most comprehensive active enzyme screening panels in the industry. With an average two-week turnaround time and flexible assay setups, clients receive fast, cost-effective, and accurate results.

Global Leader in Kinase Biology
Rigorous QA/QC Testing
Validated Activity
End-to-end Support



SignalChem Biotech
Active Enzymes



SignalChem Biotech
Range of Products

Results are provided within two weeks. Clients can submit their compounds in various forms, such as DMSO stocks of known concentration or as solid material in vials.



1400+
Active Enzymes



1100+
Kinase Variants
(Wild-type & Mutants)



Two-week
Turnaround
Time



Extensive
Kinase Expertise



Custom Assay
Development
(*in-vitro* & *in-vivo*)

Target Categories

650+ Active Protein Kinases

40+ Active Phosphatases

450+ Active Mutant Kinases

50+ Active Lipid Kinases

100+ Active Epigenetic Enzymes

50+ Active G Proteins

95+ Active DUBs & Ubiquitins

.... more

Assay Platforms

Assay technology	Assay name	Analyte	Protein family
Luminescence	ADP-Glo™	ADP	Kinase
	AMP-Glo™	AMP	Ubiquitinating enzyme (E1, E2, E3)
	MTase-Glo™	S-Adenosyl Homocysteine (SAH)	Methyltransferase
	GTPase-Glo™	GTP	GTPase
	HDAC-Glo™	Luciferin	Histone deacetylase
	PDE-Glo™	cAMP, cGMP	Phosphodiesterase
	ROS-Glo™	H2O2	Histone demethylase
	Succinate-Glo™	Succinate	Histone demethylase
UV-Vis Absorbance	DUB Lit	Luciferin	Deubiquitinase
	BIOMOL Green	Phosphate	Phosphatase
Fluorescence/TR-FRET	pNA colorimetric assay	p-Nitroanilide	Protease
	Cleavage assay, LanthaScreen	Fluorescent or phospho-peptide	Protease, kinase
Immunoassay	ELISA	Acetylated or citrullinated peptide	Bromodomain, acetyltransferase, arginine deiminase
	PROTAC assay	Ubiquitinated protein	Ubiquitin E3 ligase

Expert Enzyme Profiling Services

Representative data showing SignalChem compound profiling results

Ki determination of wild-type HER2 kinase
w/ Neratinib

HER2 Wild-type (GST) Cat.# E27-11G
Substrate (PolyEY) Cat.# P61-58

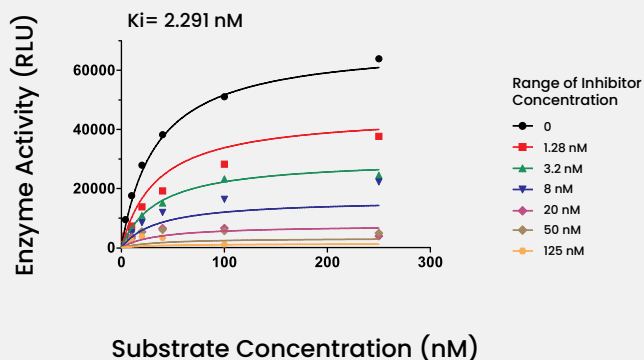


Figure 1: Ki determination of a kinase. The inhibitory constant (Ki) of a kinase was determined by varying substrate and inhibitor concentrations. The substrate Km and inhibitor IC₅₀ were first quantified to determine the optimal concentration range of each.

MET IC₅₀ determination with 4 commercial inhibitors
Crizotinib, Capmatinib, Cabozantinib, and Foretinib

Wild-type MET (GST) Cat.# M52-18G
Substrate (PolyEY) Cat.# P61-58

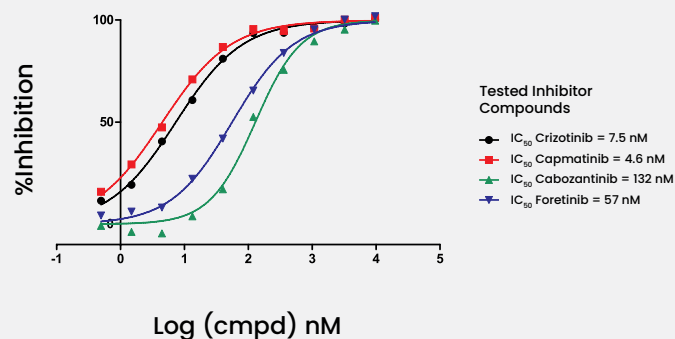


Figure 2: IC₅₀ determination of a kinase. The half maximal inhibitory concentration (IC₅₀) of a kinase was determined in response to multiple compounds.