

Product Specification Sheet

Product Name: SGX523

Catalog Number: C7523

Technical information:

Chemical Formula: $C_{18}H_{13}N_7S$

CAS #: 1022150-57-7

Molecular Weight: 359.41

Purity: > 98%

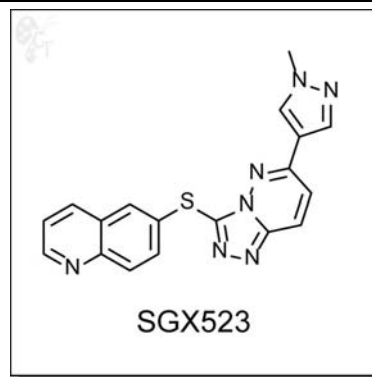
Appearance: Pale Pink solid

Solubility: Soluble in DMSO up to 5 mM

Chemical Name: 6-(6-(1-methyl-1H-pyrazol-4-yl)-[1,2,4]triazolo[4,3-b]pyridazin-3-ylthio)quinoline

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.278mL of DMSO for each mg of SGX523.
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: SGX523 is an ATP-competitive, triazolopyridazine-based inhibitor of MET at an IC₅₀ of 4 nM. SGX523 has higher affinity for the unphosphorylated form of MET (K_i = 2.7 nM) than the more active phospho-enzyme (K_i = 23 nM). In a broad panel of 213 kinases, SGX523 was extremely selective, with no inhibition >36%, suggesting IC₅₀ values > 1 μM, including the closely-associated RON kinase. [1]

SGX523 inhibits MET phosphorylation and downstream ERK and AKT activation in a dose-dependent manner, and nearly eliminates HGF-induced MET activation at 1 μM. Downstream inhibition of ERK is enhanced in combination with erlotinib, affecting tyrosine phosphorylation of ErbB3 and EGFR. In HGF-induced NCI-H596 cells, SGX523 exhibited cell cycle inhibition by reducing the number of cells in the S phase from 32% to 9%. [2]

SGX523 was discontinued in Phase I trials due to unexpected toxicity (compromised kidney function, increased serum creatinine).

- Reference:**
1. Buchanan et al., SGX523 is an exquisitely selective, ATP-competitive inhibitor of the MET receptor tyrosine kinase with antitumor activity in vivo. *Mol. Cancer Ther.* 2009, 8, 3181-3290. Pubmed ID: 19934279
 2. Zhang et al., MET kinase inhibitor SGX523 synergizes with epidermal growth factor receptor inhibitor erlotinib in a hepatocyte growth factor-dependent fashion to suppress carcinoma growth. *Cancer Res.* 2010, 70, 6880-6890. Pubmed ID: 20643778

To reorder: <http://www.cellagentech.com/SGX523/>
For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.