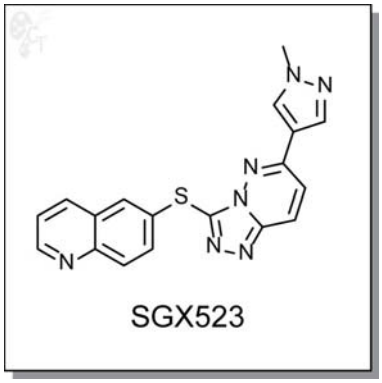
Product Specification Sheet

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 (Ki = 2.7 nM) than the more active phospho-enzyme (Ki = 23 nM). In a broad panel of 213 kinases, SGX523 was extremely selective, with no inhibition >36%, suggesting IC50 values > 1 uM, 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 uM. Downstream inhibition of ERK is enhanced in combination with erlotinib, affectding 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.