

# S49076

## Catalog No: tcsc6191



### Available Sizes

**Size:** 2mg

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



### Specifications

**CAS No:**

1265965-22-7

**Formula:**

$C_{22}H_{22}N_4O_4S$

**Pathway:**

Protein Tyrosine Kinase/RTK;Protein Tyrosine Kinase/RTK

**Target:**

c-Met/HGFR;FGFR

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 31$  mg/mL (70.70 mM)

**Observed Molecular Weight:**

438.5

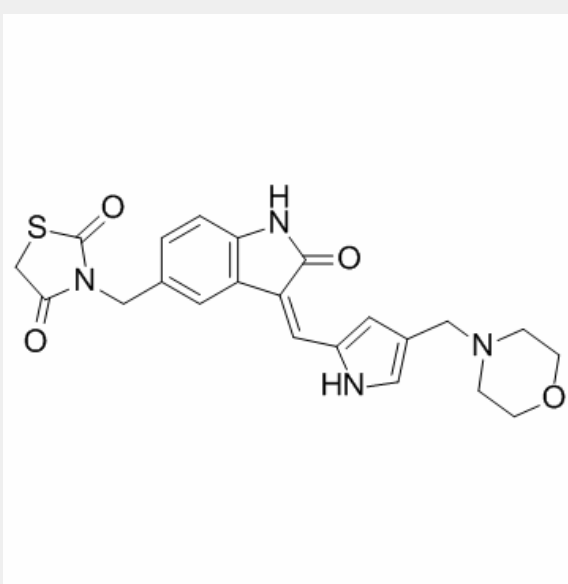
## Product Description

S49076 is a novel, potent inhibitor of **MET**, **AXL/MER**, and **FGFR1/2/3** with **IC<sub>50</sub>** values below 20 nM.

IC50 & Target: IC50:18 nM (FGFR1), 17 nM (FGFR2), 15 nM (FGFR3), 1 nM (MET), 7 nM (AXL), 2 nM (MER)<sup>[1]</sup>

**In Vitro:** S49076 potently blocks cellular phosphorylation of MET, AXL, and FGFRs and inhibits downstream signaling. S49076 inhibits the proliferation of MET- and FGFR2-dependent gastric cancer cells, blocks MET-driven migration of lung carcinoma cells, and inhibits colony formation of hepatocarcinoma cells expressing FGFR1/2 and AXL. Total inhibition of MET phosphorylation is seen after 2 hours of incubation with 10 nM S49076 and an with an IC<sub>50</sub> of 2 nM. S49076 inhibits MET phosphorylation on this site in GTL-16 gastric carcinoma cells with an IC<sub>50</sub> value of 3 nM. The IC<sub>50</sub> for AXL inhibition by S49076 is 56 nM. S49076 inhibits AXL signaling via AKT with an IC<sub>50</sub> of 33 nM<sup>[1]</sup>.

**In Vivo:** In tumor xenograft models, a good pharmacokinetic/pharmacodynamic relationship for MET and FGFR2 inhibition following oral administration of S49076 is established and correlated well with impact on tumor growth. MET, AXL, and the FGFRs have all been implicated in resistance to VEGF/VEGFR inhibitors such as bevacizumab. Combination of S49076 with bevacizumab in colon carcinoma xenograft models leads to near total inhibition of tumor growth. S49076 alone caused tumor growth arrest in bevacizumab-resistant tumors<sup>[1]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!