

AT13148

## Chemical Properties

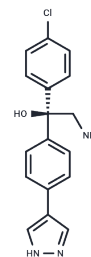
CAS No. : 1056901-62-2

Formula: C<sub>17</sub>H<sub>16</sub>ClN<sub>3</sub>O

Molecular Weight: 313.78

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



## Biological Description

Description	AT13148 is an oral-active and ATP-competitive, multi-AGC kinase inhibitor for Akt1/2/3, p70S6K, PKA, and ROCKI/II.
Targets(IC50)	Akt,PKA,ROCK,S6 Kinase,SGK
In vitro	In PTEN-deficient MES-SA cells, AT13148 was able to inhibit AKT and p70S6K signaling. In cancer cell lines with aberrant PI3K-AKT-mTOR or RAS-RAF pathways (GI50=1.5-3.8 μM), AT13148 was able to inhibit multiple AGC kinases, thereby suppressing cancer cell proliferation.
In vivo	In PTEN-deficient MES-SA cells, AT13148 was able to inhibit AKT and p70S6K signaling. In cancer cell lines with aberrant PI3K-AKT-mTOR or RAS-RAF pathways (GI50=1.5-3.8 μM), AT13148 was able to inhibit multiple AGC kinases, thereby suppressing cancer cell proliferation.
Kinase Assay	In vitro kinase assays: AT13148 is assayed against 40 kinases and the percentage inhibition at 10 μM of AT13148 is determined. Individual IC50 values are measured for selected kinases using ATP concentrations equivalent to the Km for each enzyme.
Cell Research	Cytotoxicity is determined using a 72 h Alamar Blue assay or a 96 h SRB assay. (Only for Reference)

## Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 58 mg/mL (184.84 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1869 mL	15.9347 mL	31.8695 mL
5 mM	0.6374 mL	3.1869 mL	6.3739 mL
10 mM	0.3187 mL	1.5935 mL	3.1869 mL
50 mM	0.0637 mL	0.3187 mL	0.6374 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

### Reference

Yap TA, et al. Clin Cancer Res. 2012, 18(14), 3912-3923.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

**This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use**

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