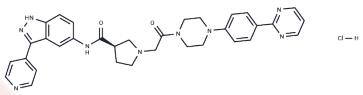
# Data Sheet (Cat.No.T23337)

TargetMol

## SCH772984 HCl

### Chemical Properties



CAS No. :

Formula: C33H34ClN9O2

Molecular Weight: 624.14

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

| | |
|---|---|
| Description | SCH772984 HCl is a selective inhibitor of ERK1/2 that displays behaviors of both type I and type II kinase inhibitors, with IC50s of 4 and 1 nM, respectively. SCH772984 HCl has nanomolar cellular potency in tumor cells with mutations in BRAF, NRAS, or KRA |
| Targets(IC50) | ERK |
| In vitro | In LOX BRAFV600E melanoma cells, SCH772984 HCl (3, 10, 30, 100, 300 nM; 24 hours) inhibited ERK and RSK phosphorylation. SCH772984 HCl showed EC50 values less than 500 nM in approximately 88% and 49% of BRAF-mutant (n=25) or RAS-mutant (n=35) tumor lines, respectively. In SCH772984 HCl-sensitive melanoma cells, SCH772984 HCl (300 nM; 24-48hours) resulted in a G1 arrest[1]. |
| In vivo | In female nude mice bearing human LOX BRAFV600E tumors, SCH772984 HCl (12.5, 25, 50 mg/kg; i.p. twice daily for 14 days) lead to 98% tumor regression at all doses. Dose-dependent antitumor activity is also observed in the KRAS-mutant pancreatic MiaPaCa model, with 36% regression at 50 mg/kg twice daily. Importantly, tumor regression is accompanied by robust inhibition of ERK phosphorylation in tumor tissue[1]. |

### Solubility Information

| | |
|---|---|
| Solubility | H2O: 23.5 mg/mL (37.65 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 1.6022 mL | 8.011 mL | 16.022 mL |
| 5 mM | 0.3204 mL | 1.6022 mL | 3.2044 mL |
| 10 mM | 0.1602 mL | 0.8011 mL | 1.6022 mL |
| 50 mM | 0.032 mL | 0.1602 mL | 0.3204 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Morris EJ, et al. Discovery of a novel ERK inhibitor with activity in models of acquired resistance to BRAF and MEK inhibitors. Cancer Discov. 2013 Jul;3(7):742-50.