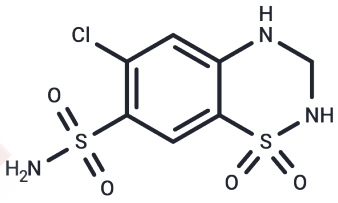
Data Sheet (Cat.No.T1449)

TargetMol

Hydrochlorothiazide

Chemical Properties



CAS No. : 58-93-5

Formula: C7H8ClN3O4S2

Molecular Weight: 297.74

Appearance: no data available

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

Biological Description

Description	Hydrochlorothiazide (HCTZ) is a Thiazide Diuretic. The physiologic effect of hydrochlorothiazide is by means of Increased Diuresis.
Targets(IC50)	Carbonic Anhydrase,Potassium Channel,TGF-beta/Smad
Kinase Assay	Kinase autophosphorylation assays: Kinase assays using wild-type and mutant glutathione S-transferase (GST)-Abl fusion proteins (c-Abl amino acids 220-498) are done. GST-Abl fusion proteins are released from glutathione-Sepharose beads before use; the concentration of ATP is 5 μM. Immediately before use in kinase autophosphorylation and in vitro peptide substrate phosphorylation assays, GST-Abl kinase domain fusion proteins are treated with LAR tyrosine phosphatase. After 1-hour incubation at 30 °C, LAR phosphatase is inactivated by addition of sodium vanadate (1 mM). Immunoblot analysis comparing untreated GST-Abl kinase to dephosphorylated GST-Abl kinase is routinely done using phosphotyrosine-specific antibody 4 g10 to confirm complete (>95%) dephosphorylation of tyrosine residues and c-Abl antibody CST 2862 to confirm equal loading of GST-Abl kinase. The Dasatinib concentration range is extended to 1,000 nM for mutant T315I. These same inhibitor concentrations are used for the in vitro peptide substrate phosphorylation assays. The three inhibitors are tested over these same concentration ranges against GST-Src kinase and GST-Lyn kinase.

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 65 mg/mL (218.31 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3586 mL	16.7932 mL	33.5864 mL
5 mM	0.6717 mL	3.3586 mL	6.7173 mL
10 mM	0.3359 mL	1.6793 mL	3.3586 mL
50 mM	0.0672 mL	0.3359 mL	0.6717 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

Ran XW, et al. Sichuan Da Xue Xue Bao Yi Xue Ban. 2005 Jul; 36(4):583-7.