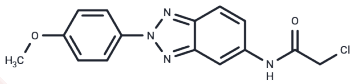
Data Sheet (Cat.No.T67839)

TargetMol

HG106

Chemical Properties



CAS No. : 928712-10-1

Formula: C15H13ClN4O2

Molecular Weight: 316.74

Storage: Store at low temperature
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	HG106, which is anti-inflammatory and may be used to treat the growth of diseases such as malignant tumours caused by mutations in the RAS gene., which is anti-inflammatory and may be used to treat the growth of diseases such as malignant tumours caused by mutations in the RAS gene.
Targets(IC50)	Apoptosis,Others
In vitro	We identified a potent SLC7A11 inhibitor, HG106, that markedly decreased cystine uptake and intracellular glutathione biosynthesis. Furthermore, HG106 exhibited selective cytotoxicity toward KRAS-mutant cells by increasing oxidative stress- and ER stress-mediated cell apoptosis. [1]
In vivo	Treatment of KRAS-mutant LUAD with HG106 in several preclinical lung cancer mouse models led to marked tumor suppression and prolonged survival. [1]

Solubility Information

Solubility	H2O: Insoluble Ethanol: Insoluble DMSO: 122.5 mg/mL (386.75 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn oil: < 10 mg/mL (31.57 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% Saline: < 10 mg/mL (31.57 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: < 10 mg/mL (31.57 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% (20% SBE-β-CD in Saline): < 10 mg/mL (31.57 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1572 mL	15.7858 mL	31.5716 mL
5 mM	0.6314 mL	3.1572 mL	6.3143 mL
10 mM	0.3157 mL	1.5786 mL	3.1572 mL
50 mM	0.0631 mL	0.3157 mL	0.6314 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

Hu K, et al. Suppression of the SLC7A11/glutathione axis causes synthetic lethality in KRAS-mutant lung adenocarcinoma. J Clin Invest. 2020;130(4):1752-1766.