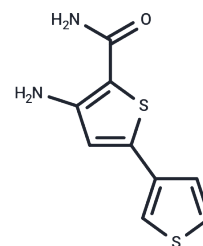


SC-514

Chemical Properties

CAS No. : 354812-17-2
 Formula: C₉H₈N₂O₂
 Molecular Weight: 224.3
 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	SC-514 (GK 01140) is a selective, orally active, ATP-competitive IKK-2 inhibitor (IC ₅₀ =11.2±4.7 μM), obstructs NF-κB-dependent gene expression.
Targets(IC ₅₀)	CDK,Aurora Kinase,IκB/IKK,p38 MAPK,Serine Protease
In vitro	In nude mice implanted with A375 or G361 tumors, daily treatment was administered with SC-514 (25 mg/kg).
In vivo	In rheumatoid arthritis synovial fibroblasts (RASFs), SC-514 (100 μM) inhibits the phosphorylation and degradation of IκBα, while also preventing the translocation of p65 into the nucleus. In the presence of IL-1β-induced inflammation, SC-514 effectively suppresses the expression of NF-κB-dependent genes: IL-6 (IC ₅₀ =20 μM), IL-8 (IC ₅₀ =20 μM), and COX-2 (IC ₅₀ =8 μM).

Solubility Information

Solubility	DMSO: 40 mg/mL (178.33 mM),Sonication is recommended. Ethanol: 2.2 mg/mL (9.81 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (8.92 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.4583 mL	22.2916 mL	44.5831 mL
5 mM	0.8917 mL	4.4583 mL	8.9166 mL
10 mM	0.4458 mL	2.2292 mL	4.4583 mL
50 mM	0.0892 mL	0.4458 mL	0.8917 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

Kishore N, et al. J Biol Chem, 2003, 278(35), 32861-32871.

Liu Y, Wang J, Chen J, et al. Upregulation of miR-520c-3p via Hepatitis B Virus Drives Hepatocellular Migration and Invasion through the PTEN/AKT/NF- κ B Signaling Pathway. Molecular Therapy-Nucleic Acids. 2022

Zhu Y, Xiao Y, Kong D, et al. Down-Regulation of miR-378d Increased Rab10 Expression to Help Clearance of Mycobacterium tuberculosis in Macrophages. Frontiers in cellular and infection microbiology. 2020, 10: 108.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481