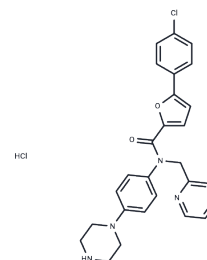


MK2-IN-1 hydrochloride

Chemical Properties

CAS No. : 1314118-94-9
 Formula: C₂₇H₂₆Cl₂N₄O₂
 Molecular Weight: 509.43
 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	MK2-IN-1 hydrochloride (MK 25) is a highly selective, non-ATP competitive inhibitor of p38/mitogen-activated protein kinase-activated protein kinase 2 (MAPKAPK2 or MK2, IC ₅₀ : 0.11 μM) [1].
Targets(IC ₅₀)	HSP,MAPK
In vitro	MK2-IN-1 has been shown to inhibit pro-inflammatory cytokine secretion from the human THP-1 acute monocytic leukemia cell line, causing inhibition of LPS-stimulated TNF-α (IC ₅₀ : 4.4 μM) and IL-6 (IC ₅₀ : 5.2 μM) secretion. ¹ It can also inhibit IL-1β-stimulated matrix-metalloprotease 13 secretion from the SW1353 chondrosarcoma cell line (IC ₅₀ : 5.7 μM) and human primary chondrocyte cultures (IC ₅₀ : 2.2 μM) [1].

Solubility Information

Solubility	DMSO: 50 mg/mL (98.15 mM),Sonication is recommended. H ₂ O: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (1.96 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	1.963 mL	9.8149 mL	19.6298 mL
5 mM	0.3926 mL	1.963 mL	3.926 mL
10 mM	0.1963 mL	0.9815 mL	1.963 mL
50 mM	0.0393 mL	0.1963 mL	0.3926 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

Huang X, Shipps Jr G W, Cheng C C, et al. Discovery and hit-to-lead optimization of non-ATP competitive MK2 (MAPKAPK2) inhibitors[J]. ACS medicinal chemistry letters, 2011, 2(8): 632-637.

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