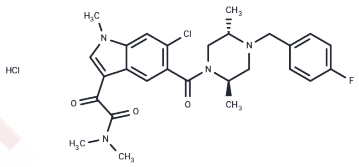
Data Sheet (Cat.No.T12871L)

TargetMol

Talmapimod hydrochloride

Chemical Properties



CAS No. : 309915-12-6

Formula: C27H31Cl2FN4O3

Molecular Weight: 549.46

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	Talmapimod hydrochloride is a selective and ATP-competitive p38α inhibitor (IC50: 9 nM). It also shows about 10-fold selectivity over p38β, and at least 2000-fold selectivity over a panel of 20 other kinases, including other MAPKs.
Targets(IC50)	p38 MAPK
In vitro	Talmapimod hydrochloride inhibits LPS-induced TNF-a production in human whole blood. Talmapimod hydrochloride decreases constitutive p38alpha MAPK phosphorylation of both 5T2MM and 5T33MM cells. Talmapimod hydrochloride (100-200 nM; 1 hour) inhibits phosphorylation of p38 MAPK in MM cells [1][2][3].
In vivo	Talmapimod hydrochloride (10-90 mg/kg; P.o.; twice daily for 14 days) dose-dependently reduced both tumor growth and the weight of palpable tumors at termination [4].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.820 mL	9.0998 mL	18.1997 mL
5 mM	0.364 mL	1.820 mL	3.6399 mL
10 mM	0.182 mL	0.910 mL	1.820 mL
50 mM	0.0364 mL	0.182 mL	0.364 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

Hideshima T et al. p38 MAPK inhibition enhances PS-341 (bortezomib)-induced cytotoxicity against multiple myeloma cells. Oncogene. 2004 Nov 18, 23(54), 8766-76.
Navas T, et al. Inhibition of p38alpha MAPK disrupts the pathological loop of proinflammatory factor production in the myelodysplastic syndrome bone marrow microenvironment. Leuk Lymphoma. 2008 Oct;49(10):1963-75.
Vanderkerken K et al. Inhibition of p38alpha mitogen-activated protein kinase prevents the development of osteolytic bone disease,reduces tumor burden, and increases survival in murine models of multiple myeloma. Cancer Res. 2007 May 15;67(10):4572-7.
Medicherla S, et al. p38alpha-selective MAP kinase inhibitor reduces tumor growth in mouse xenograft models of multiple myeloma. Anticancer Res. 2008 Nov-Dec;28(6A):3827-33.