Data Sheet (Cat.No.T12933)

TargetMol

SM-276001

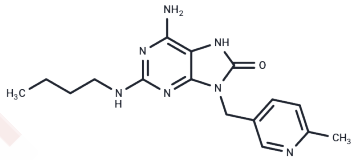
Chemical Properties

CAS No. : 473930-22-2

Formula: C16H21N7O

Molecular Weight: 327.38

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	SM-276001 is a potent, selective agonist of TLR7 and an orally active interferon (IFN) inducer.
Targets(IC50)	COX,IFNAR,TLR
In vitro	SM-276001 (1 nM-10 μM) activates NF-κB in a dose-dependent manner via human TLR7 [2].
In vivo	Oral administration of 0.1 mg/kg SM-276001 in mice shows potent IFN-inducing activity [1]. Twice weekly oral administration of SM-276001 at a dose of 3 mg/kg significantly reduced disease burden in mice bearing either Renca or CT26 tumors.[2].

Solubility Information

Solubility	DMSO: 100 mg/mL (305.46 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: 4 mg/mL (12.22 mM),Sonication is recommended. *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	3.0546 mL	15.2728 mL	30.5455 mL
5 mM	0.6109 mL	3.0546 mL	6.1091 mL
10 mM	0.3055 mL	1.5273 mL	3.0546 mL
50 mM	0.0611 mL	0.3055 mL	0.6109 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

Isobe Y, et al. Synthesis and biological evaluation of novel 9-substituted-8-hydroxyadenine derivatives as potent interferon inducers. J Med Chem. 2006 Mar 23;49(6):2088-95.

Koga-Yamakawa E, et al. Intratracheal and oral administration of SM-276001: a selective TLR7 agonist, leads to antitumor efficacy in primary and metastatic models of cancer. Int J Cancer. 2013 Feb 1;132(3):580-90.