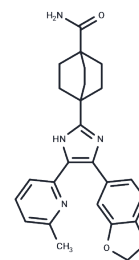


SM 16

## Chemical Properties

CAS No. :	614749-78-9
Formula:	C <sub>25</sub> H <sub>26</sub> N <sub>4</sub> O <sub>3</sub>
Molecular Weight:	430.5
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 16 is an ALK5/ALK4 kinase inhibitor with Ki values of 10 nM and 1.5 nM, respectively.
Targets(IC50)	ALK,TGF-beta/Smad

## Solubility Information

Solubility	DMSO: 6.25 mg/mL (14.52 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: 1 mg/mL (2.32 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	2.3229 mL	11.6144 mL	23.2288 mL
5 mM	0.4646 mL	2.3229 mL	4.6458 mL
10 mM	0.2323 mL	1.1614 mL	2.3229 mL
50 mM	0.0465 mL	0.2323 mL	0.4646 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

Suzuki E, et al. A novel small-molecule inhibitor of transforming growth factor beta type I receptor kinase (SM16) inhibits murine mesothelioma tumor growth in vivo and prevents tumor recurrence after surgical resection. *Cancer Res.* 2007 Mar 1;67(5):2351-9.

Fu K, et al. SM16, an orally active TGF-beta type I receptor inhibitor prevents myofibroblast induction and vascular fibrosis in the rat carotid injury model. *Arterioscler Thromb Vasc Biol.* 2008 Apr;28(4):665-71.

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