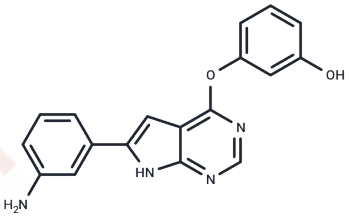
Data Sheet (Cat.No.T2166)

TWS119

Chemical Properties



CAS No. :	601514-19-6
Formula:	C18H14N4O2
Molecular Weight:	318.33
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	TWS119 is a GSK-3β inhibitor; capable of inducing neuronal differentiation
Targets(IC50)	Autophagy,GSK-3,Wnt/beta-catenin
In vivo	A cell population that expressed low levels of CD44 and high levels of CD62L on the cell surface when 30 mg/kg of TWS119 is administered. [4]

Solubility Information

Solubility	DMSO: 250 mg/mL (785.35 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 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 (6.28 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	3.1414 mL	15.707 mL	31.4139 mL
5 mM	0.6283 mL	3.1414 mL	6.2828 mL
10 mM	0.3141 mL	1.5707 mL	3.1414 mL
50 mM	0.0628 mL	0.3141 mL	0.6283 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

Ding S, et al, Pro Natl Acad Sci U S A, 2003, 100(13), 7632-7637.
Ding S, et al, Nat Biotechnol, 2004, 22(7), 833-840.
Kordes C, et al, Biochem Biophys Res Commun, 2008, 367(1), 116-123.
Gattinoni L, et al, Nat Mediicine, 2009, 15(7), 808-813.
Muralidharan S, et al, J Immunol, 2011, 187(10), 5521-5532.
Wang W, et al. GSK-3β inhibitor TWS119 attenuates rtPA-induced hemorrhagic transformation and activates the Wnt/β-catenin signaling pathway after acute ischemic stroke in rats. Mol Neurobiol. 2016 Dec;53(10):7028-7036. Epub 2015 Dec 15.
Chen YQ, et al. Wnt pathway activator TWS119 enhances the proliferation and cytolytic activity of human γδT cells against colon cancer. Exp Cell Res. 2017 Nov 16. pii: S0014-4827(17)30587-6.

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