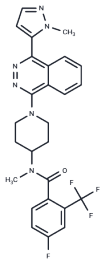
Data Sheet (Cat.No.T2666)

TargetMol

Taladegib

Chemical Properties



CAS No. : 1258861-20-9

Formula: C26H24F4N6O

Molecular Weight: 512.5

Storage: Store at low temperature
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	Taladegib (LY2940680) is an orally bioavailable small molecule antagonist of the Hedgehog (Hh)-ligand cell surface receptor smoothened (Smo) with potential antineoplastic activity.
Targets(IC50)	Hedgehog/Smoothened,Smo
In vitro	LY2940680 inhibits cancer growth in cell lines containing a mutation in the gene encoding Smoothened that researchers had previously observed in patient with cancer who developed resistance to vismodegib. [1]
In vivo	Taladegib has excellent pharmacokinetic properties in rodent and non-rodent species. Taladegib administrated orally treats Ptch+/- p53-/- transgenic mice which spontaneously develop medulloblastoma, produces remarkable efficacy and significantly improves their survival. Taladegib reveals rapid kinetics of anti-tumor activity through magnetic resonance imaging of these mice, and Taladegib induces Caspase-3 activity and reduces proliferation by immunohistochemistry analysis of medulloblastoma tumors. Taladegib inhibits Hh regulated gene expression in the subcutaneous xenograft tumor stroma and produces significant anti-tumor activity. [2]

Solubility Information

Solubility	DMSO: 5.64 mg/mL (11 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 (1.95 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	1.9512 mL	9.7561 mL	19.5122 mL
5 mM	0.3902 mL	1.9512 mL	3.9024 mL
10 mM	0.1951 mL	0.9756 mL	1.9512 mL
50 mM	0.039 mL	0.1951 mL	0.3902 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

Redmond EM et al. Expert Opin Investig Drugs, 2011, 20(12),1649-1664.
Mark H. Bender, Cancer Research, 2011, Volume 71, Issue 8, Supplement1