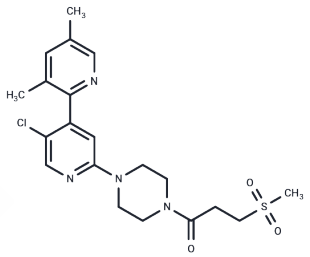
Data Sheet (Cat.No.T5465)

PF-5274857

Chemical Properties



CAS No. : 1373615-35-0

Formula: C20H25ClN4O3S

Molecular Weight: 436.96

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	PF-5274857 (PF-5274857 free base) is an effective and selective hedgehog signaling pathway inhibitor (IC50: 5.8 nM and a Ki: 4.6 nM). PF-5274857 is a potentially attractive clinical candidate for the treatment of tumor types including brain tumors and brain metastasis driven by an activated Hh pathway.PF-5274857 was found to effectively penetrate the blood-brain barrier and inhibit Smo activity in the brain of primary medulloblastoma mice, resulting in improved animal survival rates. PF-5274857 was orally available and metabolically stable in vivo.
Targets(IC50)	Smo

Solubility Information

Solubility	DMSO: 125 mg/mL (286.07 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 (9.15 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	2.2885 mL	11.4427 mL	22.8854 mL
5 mM	0.4577 mL	2.2885 mL	4.5771 mL
10 mM	0.2289 mL	1.1443 mL	2.2885 mL
50 mM	0.0458 mL	0.2289 mL	0.4577 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

Zhou WJ, Chen J, Feng Y, Fan YP, Li Q, Fu J, Zhang P. [Inhibition of Cigarettes Smoke-induced Epithelial to Mesenchymal Transition by the SMO Inhibitor PF-5274857 in Beas-2b Epithelial Cells]. Sichuan Da Xue Xue Bao Yi Xue Ban. 2016 Jul;47(4):485-490. Chinese. PubMed PMID: 28591947.

Lauressergues E, Heusler P, Lestienne F, Troulier D, Rauly-Lestienne I, Tourette A, Ailhaud MC, Cathala C, Tardif S, Denais-Lalième D, Calmettes MT, Degryse AD, Dumoulin A, De Vries L, Cussac D. Pharmacological evaluation of a series of smoothened antagonists in signaling pathways and after topical application in a depilated mouse model. Pharmacol Res Perspect. 2016 Mar 4;4(2):e00214. doi: 10.1002/prp2.214. eCollection 2016 Apr. PubMed PMID: 27069629; PubMed Central PMCID: PMC4804317.

Rohner A, Spilker ME, Lam JL, Pascual B, Bartkowski D, Li QJ, Yang AH, Stevens G, Xu M, Wells PA, Planken S, Nair S, Sun S. Effective targeting of Hedgehog signaling in a medulloblastoma model with PF-5274857, a potent and selective Smoothened antagonist that penetrates the blood-brain barrier. Mol Cancer Ther. 2012 Jan;11(1):57-65. doi: 10.1158/1535-7163.MCT-11-0691. Epub 2011 Nov 14. PubMed PMID: 22084163.