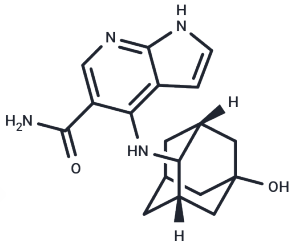
Data Sheet (Cat.No.T6933)

TargetMol

Peficitinib

Chemical Properties



CAS No. : 944118-01-8

Formula: C18H22N4O2

Molecular Weight: 326.39

Storage: Keep away from direct sunlight,Keep away from moisture
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	Peficitinib (ASP015K) (ASP015K, JNJ-54781532) is an orally bioavailable JAK inhibitor. Phase 3.
Targets(IC50)	JAK,Tyrosine Kinases
In vitro	ASP015K suppresses the IL-2-induced proliferation of human T cells with greater potency than EPO-induced proliferation of human erythroleukemia cells. In human whole blood, ASP015K inhibits STAT5 phosphorylation (pSTAT5). [1]
In vivo	In the rat AIA model, ASP015K (p.o.) significantly decreases paw swelling and ankle bone destruction score. [1]

Solubility Information

Solubility	H2O: <1 mg/mL, Ethanol: <1 mg/mL, DMSO: 83.3 mg/mL (255.22 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: 8.33 mg/mL (25.52 mM),Solution. 10% DMSO+90% Saline: < 8.33 mg/mL (25.52 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	3.0638 mL	15.3191 mL	30.6382 mL
5 mM	0.6128 mL	3.0638 mL	6.1276 mL
10 mM	0.3064 mL	1.5319 mL	3.0638 mL
50 mM	0.0613 mL	0.3064 mL	0.6128 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

Párrizas M, et al. Endocrinology, 1997, 138(4), 1427-1433
Si H, Wang J, He R, et al. Identification of U937JAK3-M511I Acute Myeloid Leukemia Cells as a Sensitive Model to JAK3 Inhibitor. Frontiers in oncology. 2021, 11: 807200-807200.