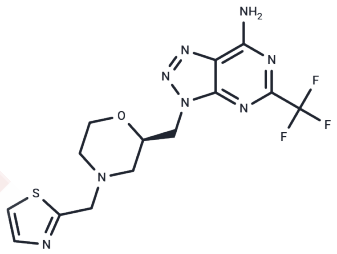
Data Sheet (Cat.No.T12422)

PF-04957325

Chemical Properties



CAS No. : 1305115-80-3

Formula: C14H15F3N8OS

Molecular Weight: 400.38

Storage: Store at low temperature,Keep away from direct sunlight
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-04957325 is a potent and selective inhibitor of PDE8.PF-04957325 has an IC50 of 0.7 nM for PDE8A and 0.3 nM for PDE8B.PF-04957325 can be used to study autoimmune encephalomyelitis.
Targets(IC50)	PDE
In vitro	The PDE8 selective inhibitor PF-04957325 exhibits an IC50 of 0.7 nM for PDE8A and 0.2 nM for PDE8B, while its IC50 for all other PDE isoforms is greater than 1.5 μM [3]. Treatment with PF-04957325 in WT Leydig cells or MA10 cells increases steroid production, but has no effect in PDE8A(-/-)/B(-/-) double knockout cells, indicating the drug's specificity [4].

Solubility Information

Solubility	DMSO: 80 mg/mL (199.81 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: 3.3 mg/mL (8.24 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	2.4976 mL	12.4881 mL	24.9763 mL
5 mM	0.4995 mL	2.4976 mL	4.9953 mL
10 mM	0.2498 mL	1.2488 mL	2.4976 mL
50 mM	0.050 mL	0.2498 mL	0.4995 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

Vang AG, et al. Differential Expression and Function of PDE8 and PDE4 in Effector T cells: Implications for PDE8 as a Drug Target in Inflammation. Front Pharmacol. 2016 Aug 23;7:259.
Dong H, et al. Inhibition of breast cancer cell migration by activation of cAMP signaling. Breast Cancer Res Treat. 2015 Jul;152(1):17-28.
Tsai LC, et al. Regulation of adrenal steroidogenesis by the high-affinity phosphodiesterase 8 family. Horm Metab Res. 2012 Sep;44(10):790-4.
Shimizu-Albergine M, et al. cAMP-specific phosphodiesterases 8A and 8B, essential regulators of Leydig cell steroidogenesis. Mol Pharmacol. 2012 Apr;81(4):556-66.