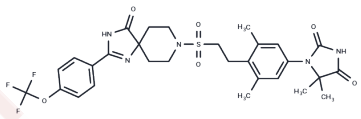
Data Sheet (Cat.No.T16442)

PCO371

Chemical Properties



CAS No. :	1613373-33-3
Formula:	C29H32F3N5O6S
Molecular Weight:	635.65
Storage:	Keep away from direct sunlight,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	PCO371 (2,4-Imidazolidinedione, 1-(3,5-dimethyl-4-(2-((4-oxo-2-(4-(trifluoromethoxy) phenyl)-1,3,8-triazaspiro(4.5)dec-1-en-8-yl)sulfonyl)ethyl)phenyl)-5,5-dimethyl-) is an orally active full agonist of parathyroid hormone receptor 1. It has no effect on PTH type 2 receptor.
Targets(IC50)	Thyroid hormone receptor(THR)
In vitro	In COS-7 cells expressing hPTHR1, PCO371 causes cAMP production (EC50: 2.4?μM). 2.5 μM in COS-7 cells transfected with hPTHR1-delNT, and also enhances the phospholipase C activity (EC50, 17?μM)[1].

Solubility Information

Solubility	DMSO: 120 mg/mL (188.78 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: 5 mg/mL (7.87 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	1.5732 mL	7.866 mL	15.7319 mL
5 mM	0.3146 mL	1.5732 mL	3.1464 mL
10 mM	0.1573 mL	0.7866 mL	1.5732 mL
50 mM	0.0315 mL	0.1573 mL	0.3146 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

Tamura T, et al. Identification of an orally active small-molecule PTHR1 agonist for the treatment of hypoparathyroidism. Nat Commun. 2016 Nov 18;7:13384.