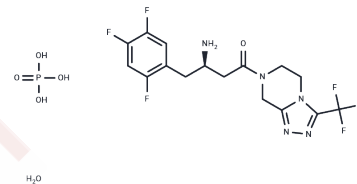


Sitagliptin phosphate monohydrate

Chemical Properties

CAS No. :	654671-77-9
Formula:	C ₁₆ H ₁₅ F ₆ N ₅ O·H ₃ PO ₄ ·H ₂ O
Molecular Weight:	523.33
Storage:	Store under nitrogen Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Sitagliptin phosphate monohydrate (MK-0431 phosphate monohydrate) is a potent DPP-IV inhibitor with an IC ₅₀ of 19 nM in Caco-2 cell extracts.
Targets(IC ₅₀)	Proteasome,DPP-4,Autophagy
In vitro	The IC ₅₀ of Nelarabine is 25-fold and 113-fold higher than ARAC in T- and B-lineage, respectively. T-ALL cells are eightfold more sensitive to Nelarabine than B-lineage but there is considerable overlap. The efficacy of NEL in T-lineage and B-lineage cell lines is 25-fold and 113-fold less than ARAC, respectively. [1] Nelarabine acts by inhibiting DNA synthesis and inducing apoptosis in susceptible cells. [2] Nelarabine demonstrated significant antineoplastic activity with acceptable toxicity. [3]

Solubility Information

Solubility	H ₂ O: 38 mg/mL (72.61 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 93 mg/mL (177.71 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9108 mL	9.5542 mL	19.1084 mL
5 mM	0.3822 mL	1.9108 mL	3.8217 mL
10 mM	0.1911 mL	0.9554 mL	1.9108 mL
50 mM	0.0382 mL	0.1911 mL	0.3822 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

Thomas L et al. J Pharmacol Exp Ther. 2008; 325(1): 175-182.

Kim SJ et al. Diabetes. 2009; 58(3): 641-651.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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