

1G244

Chemical Properties

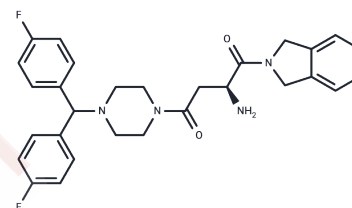
CAS No. : 847928-32-9

Formula: C₂₉H₃₀F₂N₄O₂

Molecular Weight: 504.57

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	1G244 is an inhibitor of DPP8/9 with antiatherosclerotic and antimyeloma properties. 1G244 had the IC ₅₀ values of 14 and 53 nM against DPP8 and DPP9, and The Ki values for 1G244 were 0.9 and 4.2 nM for DPP8 and DPP9
Targets(IC ₅₀)	Apoptosis, Proteasome
In vitro	1G244 (0-100 μM) dose-dependently decreased viable cell number of five multiple myeloma cell lines as well as three T-cell lymphoma cell lines[2].
In vivo	The apoE ^{-/-} mice treated with 1G244 (1G244 dissolved in 75% PEG 300, 2 mg/kg) showed that 1G244 reduced the area of advanced atherosclerotic lesions by about 14% [1]. 1G244 was administered subcutaneously into mice at 30mg/kg once a week, administration of 1G244 apparently suppressed the subcutaneous growth of MM.1S cells [2].

Solubility Information

Solubility	DMSO: 250 mg/mL (495.47 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 (9.91 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9819 mL	9.9094 mL	19.8189 mL
5 mM	0.3964 mL	1.9819 mL	3.9638 mL
10 mM	0.1982 mL	0.9909 mL	1.9819 mL
50 mM	0.0396 mL	0.1982 mL	0.3964 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

Sato T, et al. DPP8 is a novel therapeutic target for multiple myeloma. *Sci Rep.* 2019 Dec 2;9(1):18094.

Wiśniewska A, et al. The antiatherosclerotic action of 1G244 - An inhibitor of dipeptidyl peptidases 8/9 - is mediated by the induction of macrophage death. *Eur J Pharmacol.* 2023 Apr 5;944:175566.

Leen Heirbaut, et al. Probing for improved selectivity with dipeptidederived inhibitors of dipeptidyl peptidases 8 and 9: the impact of P1-variation. *MedChemComm.* 2016, 7.

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