Data Sheet (Cat.No.T214331)

TargetMol

DPP9-IN-2

Chemical Properties

CAS No. :	3020859-44-0
Formula:	C33H33F2N3O2
Molecular Weight:	541.64
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	DPP9-IN-2 is a selective and potent orally active inhibitor of dipeptidyl peptidase 9 (DPP9), with an IC50 value of 12.9 nM. It exhibits a selectivity index of 59 for DPP8 and shows no significant inhibitory activity on related peptidases, including DPP2, DPP4, FAP, and PREP. DPP9-IN-2 can induce pyroptosis in cancer cells and demonstrates modest synergistic anti-HIV-1 activity when combined with non-nucleoside reverse transcriptase inhibitors. This compound is applicable for research in cancer and infection.
Targets(IC50)	Pyroptosis
In vitro	DPP9-IN-2 (Compound 6e) at concentrations of 0.05-5 μM and exposure times between 24-48 hours induces pyroptosis in THP-1 cells, leading to increased LDH release and SYTOX Green uptake. When used at 0.5-5 μM for 24 hours, DPP9-IN-2-induced pyroptosis relies on DPP9, CASP1, and GSDMD, and is significantly inhibited or delayed in THP-1 cells that have DPP9 knockdown, CASP1 knockout, or GSDMD knockout. At 5 μM, DPP9-IN-2 shows weak synergistic anti-HIV-1 activity in combination with non-nucleoside reverse transcriptase inhibitors, such as Efavirenz and Rilpivirine, in MT-4 cells.
In vivo	DPP9-IN-2 (Compound 6e) either intravenously at 5 mg/kg or orally at 20 mg/kg increases the necrosis rate of $CD3^{-}CD11b^{-}$ leukocytes (such as B cells and NK cells) in Wistar rats.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8462 mL	9.2312 mL	18.4624 mL
5 mM	0.3692 mL	1.8462 mL	3.6925 mL
10 mM	0.1846 mL	0.9231 mL	1.8462 mL
50 mM	0.0369 mL	0.1846 mL	0.3692 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.