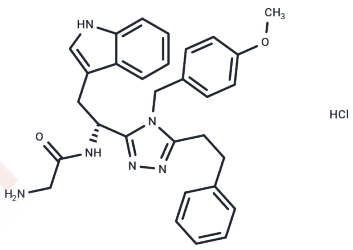
Data Sheet (Cat.No.T11719)

TargetMol

JMV 2959 hydrochloride (925238-89-7 free base)

Chemical Properties



CAS No. : 2448414-54-6

Formula: C30H33ClN6O2

Molecular Weight: 545.08

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	JMV 2959 hydrochloride (925238-89-7 free base) is a growth hormone secretagogue receptor type 1a (GHS-R1a) antagonist with an IC50 of 32±3 nM in LLC-PK1 cells.
Targets(IC50)	GHSR
In vitro	JMV 2959 does not induce any intracellular calcium mobilization by itself. The dissociation constant of the receptor/JMV 2959 complex is determined by the Schild method. This experiment reveals a dissociation constant Kb of 19±6 nM.JMV 2959 is a growth hormone secretagogue receptor type 1a (GHS-R1a) antagonist with an IC50 of 32 nM.
In vivo	Intraperitoneal (i.p.) administration of Ghrelin at doses of 0.033, 0.1, and 0.33 mg/kg does not significantly affect acoustic startle responses (ASR) or prepulse inhibition (PPI) in rats. Conversely, i.p. injection of JMV 2959 at 1, 3, and 6 mg/kg reduces ASR and enhances PPI in a dose-dependent manner. While JMV 2959 at a non-effective dose on its own prevents PPI deficits induced by Phencyclidine (PCP) at 2 mg/kg, pre-administration of the highest dose of Ghrelin does not alter PPI responses to a sub-threshold dose of PCP (0.75 mg/kg).

Solubility Information

Solubility	DMSO: 250 mg/mL (458.65 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 (6.05 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	1.8346 mL	9.173 mL	18.3459 mL
5 mM	0.3669 mL	1.8346 mL	3.6692 mL
10 mM	0.1835 mL	0.9173 mL	1.8346 mL
50 mM	0.0367 mL	0.1835 mL	0.3669 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

Moulin A, et al. The 1,2,4-triazole as a scaffold for the design of ghrelin receptor ligands: development of JMV 2959, a potent antagonist. Amino Acids. 2013 Feb;44(2):301-14.
Engel JA, et al. Blockade of growth hormone secretagogue receptor 1A signaling by JMV 2959 attenuates the NMDAR antagonist, phencyclidine-induced impairments in prepulse inhibition. Psychopharmacology (Berl). 2015 Dec;232(23):4285-92.