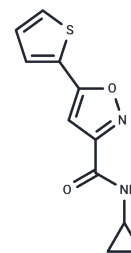


ISX-9

Chemical Properties

CAS No. : 832115-62-5
 Formula: C₁₁H₁₀N₂O₂S
 Molecular Weight: 234.27
 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	ISX-9 (Isoxazole 9) is essential for activating neuron-specific genes and serves as a neurogenesis inducer.
Targets(IC50)	Calcium Channel,Wnt/beta-catenin
In vitro	In NSPCs, isoxazole 9 increases cell number, and promotes cell differentiation. In OPCs, isoxazole 9 induces cell damage. In outgrowth EPCs, isoxazole 9 decreases tube formation without effect on early EPCs. [1]
In vivo	In mice, isoxazole 9 (20 mg/kg, i.p.) crosses the BBB and increases proliferation of neuroblasts and neurogenesis via Mef2-specific mechanisms in the hippocampal SGZ. Isoxazole 9 (20 mg/kg, i.p.) also increases differentiation and dendritic complexity of immature neurons and improves memory. In MWM, isoxazole 9 improves spatial memory. [2]
Cell Research	Cells are treated with different concentrations of Isx-9 (0, 6.25, 12.5, 25, or 50 μM), and 2 days later, cell numbers are counted in a blinded manner to evaluate the effects of Isx-9 on the proliferation/survival of four types of progenitor/precursor cells.(Only for Reference)

Solubility Information

Solubility	Ethanol: 11 mg/mL (46.95 mM),Sonication is recommended. DMSO: 85 mg/mL (362.83 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: 2 mg/mL (8.54 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	4.2686 mL	21.3429 mL	42.6858 mL
5 mM	0.8537 mL	4.2686 mL	8.5372 mL
10 mM	0.4269 mL	2.1343 mL	4.2686 mL
50 mM	0.0854 mL	0.4269 mL	0.8537 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

Koh SH, et al. PLoS One. 2015, 10(9), e0138724.

Sayed S, Shekh M, Song J, et al. ISX9 loaded thermoresponsive nanoparticles for hair follicle regrowth. Materials Today Bio. 2023: 100849.

Petrik D, et al. FASEB J. 2012, 26(8), 3148-3162.

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