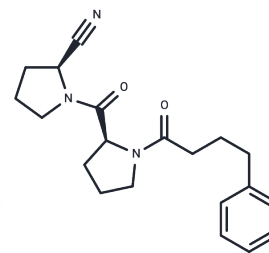


KYP-2047

Chemical Properties

CAS No. : 796874-99-2
 Formula: C₂₀H₂₅N₃O₂
 Molecular Weight: 339.43
 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	KYP-2047 is a very potent, selective Prolyl oligopeptidase (POP) inhibitor.
Targets(IC50)	Apoptosis,Others,Prolyl Endopeptidase (PREP),MDM-2/p53
In vitro	In cell lines, oxidative stress induced a robust aggregation of α -synuclein,and low concentrations of KYP-2047 significantly reduced the number of cells with α -synuclein inclusions while abolishing the colocalization of α -synuclein and PREP. KYP-2047 significantly reduced the amount of aggregated α -synuclein,and it had beneficial effects on cell viability.?In the transgenic mice, a 5-day treatment with the PREP inhibitor reduced the amount of α -synuclein immunoreactivity and soluble α -synuclein protein in the brain[1].

Solubility Information

Solubility	DMSO: 25 mg/mL (73.65 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: 2 mg/mL (5.89 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	2.9461 mL	14.7306 mL	29.4612 mL
5 mM	0.5892 mL	2.9461 mL	5.8922 mL
10 mM	0.2946 mL	1.4731 mL	2.9461 mL
50 mM	0.0589 mL	0.2946 mL	0.5892 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

T T Myöhänen 1 , M J Hannula, R Van Elzen, et al. A prolyl oligopeptidase inhibitor, KYP-2047, reduces α -synuclein protein levels and aggregates in cellular and animal models of Parkinson's disease. *Br J Pharmacol.* 2012 Jun; 166 (3):1097-113.

Jalkanen A J , Leikas J V , Forsberg M M . KYP-2047 Penetrates Mouse Brain and Effectively Inhibits Mouse Prolyl Oligopeptidase[J]. *Basic & Clinical Pharmacology & Toxicology*, 2014, 114(6):460-463.

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