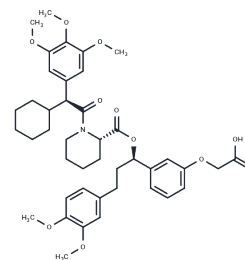


SAFit1

Chemical Properties

CAS No. :	1643125-32-9
Formula:	C42H53NO11
Molecular Weight:	747.87
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	SAFit1 is a highly potent and selective inhibitor of FK506 binding protein 51 (FKBP51) with a K_i value of 4 ± 0.3 nM, extensively applied in stress biology, neuropsychiatric disorder research, and metabolic disease studies to dissect FKBP51-specific signaling pathways and evaluate its role as a therapeutic target distinct from closely related FKBP family members.
Targets(IC50)	FKBP
In vitro	In neurodevelopmental assays involving N2a, SH-SY5Y neuroblastoma cell lines, and primary hippocampal neurons, SAFit1 acted as a selective FKBP51 inhibitor. It stimulated neurite outgrowth and promoted neuronal differentiation and extension over a concentration range of 1 to 1000 nM [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (106.97 mM), Sonication is recommended. Methanol: 125 mg/mL (167.14 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 (4.41 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	1.3371 mL	6.6857 mL	13.3713 mL
5 mM	0.2674 mL	1.3371 mL	2.6743 mL
10 mM	0.1337 mL	0.6686 mL	1.3371 mL
50 mM	0.0267 mL	0.1337 mL	0.2674 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

Gaali S, et al. Selective inhibitors of the FK506-binding protein 51 by induced fit. *Nat Chem Biol.* 2015 Jan;11(1):33-7.

Sidibeh CO, et al. FKBP5 expression in human adipose tissue: potential role in glucose and lipid metabolism, adipogenesis and type 2 diabetes. *Endocrine.* 2018 Oct;62(1):116-128.

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