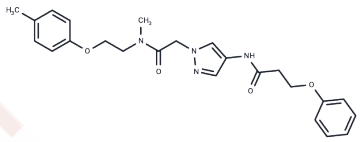
Data Sheet (Cat.No.T9349)

TargetMol

IXA4

Chemical Properties



CAS No. : 1185329-96-7

Formula: C24H28N4O4

Molecular Weight: 436.5

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	IXA4 is a highly selective, nontoxic activator of IRE1/XBP1s and reduces APP secretion by activating IRE1. IXA4-stimulated IRE1 activation also enhanced pancreatic function.
Targets(IC50)	IRE1
In vitro	In other cell lines including Huh7 and SHSY5Y cells, IXA4 selectively upregulated XBP1s mRNA relative to genes regulated by ATF6 (eg BiP) or PERK (eg CHOP). IXA4 reduces Aβ levels by 50% in conditioned medium prepared on CHO7PA2 cells expressing the V717F APP (APPV717F) mutant [1]. IXA4 rescues mitochondrial defects in SH-SY5Y cells expressing disease-associated APP mutants. After 4 h of treatment in HEK293T cells, IXA4 promotes adaptive IRE1/XBP1s signaling, but not RIDD [1]. IXA4 also promotes selective transcriptional remodeling of the ER proteostasis pathway relative to the cytoplasmic or mitochondrial pathway [1].

Solubility Information

Solubility	DMSO: 145 mg/mL (332.19 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 (4.58 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	2.291 mL	11.4548 mL	22.9095 mL
5 mM	0.4582 mL	2.291 mL	4.5819 mL
10 mM	0.2291 mL	1.1455 mL	2.291 mL
50 mM	0.0458 mL	0.2291 mL	0.4582 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

Grandjean JMD, et al. Pharmacologic IRE1/XBP1s activation confers targeted ER proteostasis reprogramming. Nat Chem Biol. 2020;16(10):1052-1061.