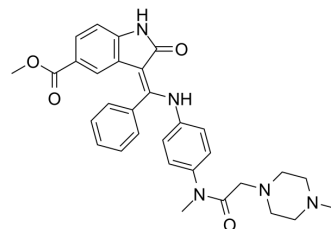


MELK-IN-1

Cat. No.:	HY-101515		
CAS No.:	2095596-44-2		
Molecular Formula:	C ₃₁ H ₃₃ N ₅ O ₄		
Molecular Weight:	539.62		
Target:	MELK		
Pathway:	PI3K/Akt/mTOR		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 13.33 mg/mL (24.70 mM; ultrasonic and warming and heat to 60°C)

Concentration	Solvent	Mass	Preparing Stock Solutions		
			1 mg	5 mg	10 mg
1 mM			1.8532 mL	9.2658 mL	18.5316 mL
5 mM			0.3706 mL	1.8532 mL	3.7063 mL
10 mM			0.1853 mL	0.9266 mL	1.8532 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: 1.33 mg/mL (2.46 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: 1.33 mg/mL (2.46 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

MELK-IN-1 is a potent inhibitor of maternal embryonic leucine zipper kinase (MELK) with an IC₅₀ and a K_i of 3 nM and 0.39 nM, respectively.

IC₅₀ & Target

IC₅₀: 3 nM (MELK)
K_i: 0.39 nM (MELK)
[1]

REFERENCES

[1]. Edupuganti R, et al. Discovery of a potent inhibitor of MELK that inhibits expression of the anti-apoptotic protein Mcl-1 and TNBC cell growth. *Bioorg Med Chem*. 2017 May 1;25(9):2609-2616.

Caution: Product has not been fully validated for medical applications. For research use only.

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