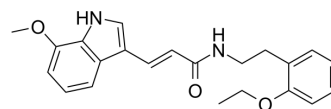


Jl051

Cat. No.:	HY-117113		
CAS No.:	2234281-75-3		
Molecular Formula:	C ₂₂ H ₂₄ N ₂ O ₃		
Molecular Weight:	364.44		
Target:	Notch		
Pathway:	Neuronal Signaling; Stem Cell/Wnt		
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 : 125 mg/mL (342.99 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM		2.7439 mL	13.7197 mL	27.4394 mL
		5 mM		0.5488 mL	2.7439 mL	5.4879 mL
10 mM			0.2744 mL	1.3720 mL	2.7439 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (5.71 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.71 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Jl051 is a stabilizer for the Hes1-PHB2 interaction. Jl051 interacts with a cancer-associated protein chaperone prohibitin 2 (PHB2), induces cell-cycle arrest by inhibiting the Notch downstream effector gene Hes1. Anti-cancer activity ^[1] .	
In Vitro	Jl051 causes G2/M cell-cycle arrest ^[1] . Jl051 (0.1-10 μM, 24 hours) significantly inhibits cell proliferation of HEK293 cells, with an EC ₅₀ of 0.3 μM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Proliferation Assay ^[1]	
	Cell Line:	HEK293 cells

Concentration:	0.1-10 μ M
Incubation Time:	24 hours
Result:	Dose-dependently inhibits the proliferation of HEK293 cells at low concentrations.

REFERENCES

[1]. Perron A, et al. Small-molecule screening yields a compound that inhibits the cancer-associated transcription factor Hes1 via the PHB2 chaperone. J Biol Chem. 2018 May 25;293(21):8285-8294.

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

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