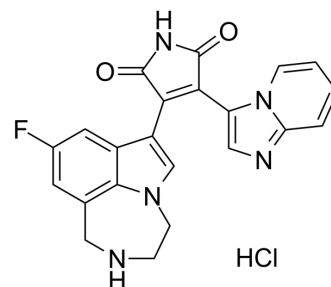


GSK-3 inhibitor 1

Cat. No.:	HY-13973A
CAS No.:	603272-51-1
Molecular Formula:	C ₂₂ H ₁₇ ClFN ₅ O ₂
Molecular Weight:	437.85
Target:	GSK-3
Pathway:	PI3K/Akt/mTOR; Stem Cell/Wnt
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 12.5 mg/mL (28.55 mM); ultrasonic and warming and heat to 60°C				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.2839 mL	11.4194 mL	22.8389 mL
		5 mM	0.4568 mL	2.2839 mL	4.5678 mL
		10 mM	0.2284 mL	1.1419 mL	2.2839 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: ≥ 1.25 mg/mL (2.85 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.25 mg/mL (2.85 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	GSK-3 inhibitor 1 (compound core 3) is a GSK-3 inhibitor that induces stem/progenitor cell self-renewal (e.g. induces stem/progenitor cell proliferation while maintaining the ability to differentiate into tissue cells in the progeny) ^{[1][2]} .
IC ₅₀ & Target	GSK-3
In Vitro	GSK-3 inhibitor 1 can be used to induce, promote or enhance the growth, proliferation or regeneration of inner ear tissues such as inner ear supporting cells or inner ear hair cells ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

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- J Exp Clin Cancer Res. 2022 Jan 26;41(1):38.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Christopher Loose, et al. 1h-pyrrole-2,5-dione compounds and methods of using them to induce self-renewal of stem/progenitor supporting cells. Patent WO2018125746A1.

[2]. SOLUBILIZED COMPOSITIONS FOR CONTROLLED PROLIFERATION OF STEM CELLS / GENERATING INNER EAR HAIR CELLS USING GSK3 INHIBITORS: III. 20170252449 A1

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

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