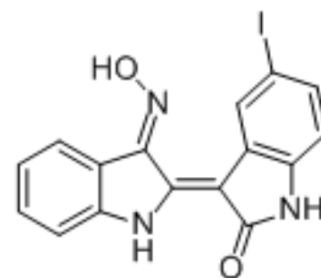


5-Iodo-indirubin-3'-monoxime

Cat. No.:	HY-111930		
CAS No.:	331467-03-9		
Molecular Formula:	C ₁₆ H ₁₀ IN ₃ O ₂		
Molecular Weight:	403.17		
Target:	GSK-3; CDK		
Pathway:	PI3K/Akt/mTOR; Stem Cell/Wnt; Cell Cycle/DNA Damage		
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 : 67.5 mg/mL (167.42 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.4803 mL	12.4017 mL	24.8034 mL
		5 mM	0.4961 mL	2.4803 mL	4.9607 mL
10 mM		0.2480 mL	1.2402 mL	2.4803 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: ≥ 2.25 mg/mL (5.58 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	5-Iodo-indirubin-3'-monoxime is a potent GSK-3β, CDK5/P25 and CDK1/cyclin B inhibitor, competing with ATP for binding to the catalytic site of the kinase, with IC ₅₀ s of 9, 20 and 25 nM, respectively ^[1] .		
IC₅₀ & Target	GSK-3β 9 nM (IC ₅₀)	Cdk5/p25 20 nM (IC ₅₀)	Cdk1/cyclin B 25 nM (IC ₅₀)

REFERENCES

[1]. Leclerc S, et al. Indirubins inhibit glycogen synthase kinase-3 beta and CDK5/p25, two protein kinases involved in abnormal tau phosphorylation in Alzheimer's disease. A property common to most cyclin-dependent kinase inhibitors? J Biol Chem. 2001 Jan 5;276(1):251-60.

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

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