

Indirubin-5-sulfonate

Chemical Properties

CAS No.:	244021-67-8
Formula:	C ₁₆ H ₁₀ N ₂ O ₅ S
Molecular Weight:	342.33
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Indirubin-5-sulfonate shows inhibitory activity against GSK-3 β . Indirubin-5-sulfonate is a cyclin-dependent kinase (CDK) inhibitor, with IC ₅₀ values of 55 nM, 35 nM, 150 nM, 300 nM and 65 nM for CDK1/cyclin B, CDK2/cyclin A, CDK2/cyclin E, CDK4/cyclin D1, and CDK5/p35, respectively.
Targets(IC ₅₀)	Cdk1/cyclin B: 55 nM cdk2/cyclin A: 35 nM CDK2/cyclinE: 150 nM Cdk4/cyclin D1: 300 nM CDK5/p35: 65 nM GSK-3 β : None

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.921 mL	14.606 mL	29.212 mL
5 mM	0.584 mL	2.921 mL	5.842 mL
10 mM	0.292 mL	1.461 mL	2.921 mL
50 mM	0.058 mL	0.292 mL	0.584 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Hoessel R, et al. Indirubin, the active constituent of a Chinese antileukaemia medicine, inhibits cyclin-dependent kinases. Nat Cell Biol. 1999 May;1(1):60-7.
2. 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.

Inhibitors · Natural Compounds · Compound Libraries

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Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street,Wellesley Hills,MA 02481