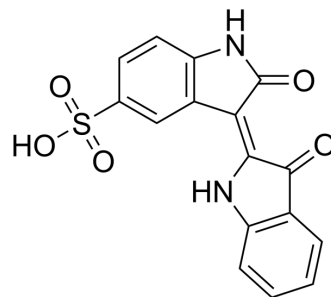


Indirubin-5-sulfonate

Cat. No.:	HY-111932
CAS No.:	244021-67-8
Molecular Formula:	C ₁₆ H ₁₀ N ₂ O ₅ S
Molecular Weight:	342.33
Target:	CDK; GSK-3
Pathway:	Cell Cycle/DNA Damage; PI3K/Akt/mTOR; Stem Cell/Wnt
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	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 ^[1] . Indirubin-5-sulfonate also shows inhibitory activity against GSK-3β ^[2] .			
IC₅₀ & Target	Cdk1/cyclin B 55 nM (IC ₅₀)	cdk2/cyclin A 35 nM (IC ₅₀)	CDK2/cyclinE 150 nM (IC ₅₀)	Cdk4/cyclin D1 300 nM (IC ₅₀)
	CDK5/p35 65 nM (IC ₅₀)	GSK-3β (^[2])		

REFERENCES

- [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.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA