Product Data Sheet

Product Name: Indirubin-5-sulfonate
Cat. No.: GC36313

Chemical Properties

Cas. No.	244021-67-8		
SMILES	O=S(C1=CC2=C(NC(/C2=C3NC4=C(C=CC=C4)C/3=O)=O)C=C1)(O)=O		
Formula	$C_{16}H_{10}N_2O_5S$	M.Wt	342.33
Solubility	Soluble in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Indirubin-5-sulfonate		

Background

Indirubin-5-sulfonate is a cyclin-dependent kinase (CDK) inhibitor, with IC50 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]. Cdk1/cyclin B|55 nM (IC50)|cdk2/cyclin A|35 nM (IC50)|CDK2/cyclinE|150 nM (IC50)|Cdk4/cyclin D1|300 nM (IC50)|CDK5/p35|65 nM (IC50)|GSK-3β

[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.

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