Catalog # 10-1488

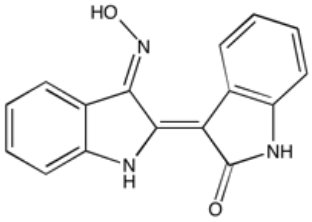
Indirubin-3'-monoxime

CAS# 160807-49-8

Indirubin-3'oxime

3-[1,3-Dihydro-3-(hydroxyimino-2H-indol-2-ylidene]-1,3-dihydro-2H-indol-2-one

Lot # X101225



A potent GSK-3β inhibitor (IC_{50}=22 nM)[1]. Also inhibits CDK1 (IC_{50}=180 nM) and CDK5 (IC_{50}=100 nM)[1]. Displays antimitotic properties and induces endoreplication following prophase arrest in HBL-100 cells[2]. Possesses antiangiogenic activity[3]. Attenuates β-amyloid-associated neuropathology in a mouse model of Alzheimer's disease[4]. Cell permeable.

1) Leclerc *et al*. (2001), *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., **276** 251
2) Damiens *et al*. (2001), *Anti-mitotic properties of indirubin-3'-monoxime, a CDK/GSK-3 inhibitor: induction of endoreplication following prophase arrest*; Oncogene, **20** 3786
3) Kim *et al*. (2011), *Indirubin-3'-monoxime, a derivative of a chinese antileukemia medicine, inhibits angiogenesis*; J. Cell. Biochem., **112** 1384
4) Ding *et al*. (2010), *Indirubin-3'-monoxime rescues spatial memory deficits and attenuates beta-amyloid-associated neuropathology in a mouse model of Alzheimer's disease*; Neurobiol. Dis., **39** 156

PHYSICAL DATA

Molecular Weight:	277.29
Molecular Formula:	$C_{16}H_{11}N_3O_2$
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 6 mg/ml) or Ethanol (up to 4 mg/ml)
Physical Description:	Dark red or brown solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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