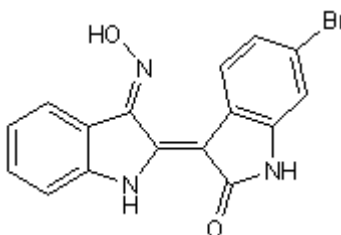


Product Name: BIO
CAS Number: 667463-62-9
IUPAC Name: (2'Z,3'E)-6-Bromoindirubin-3'-oxime

Catalog No.: 3194 **Batch No.:** 3

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₁₀BrN₃O₆·¾H₂O
Batch Molecular Weight: 369.68
Physical Appearance: Red solid
Solubility: DMSO to 10 mM
 ethanol to 10 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.1% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	51.98	3.14	11.37
Found	52.13	2.88	11.17

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: BIO

Catalog No.: 3194

Batch No.: 3

CAS Number: 667463-62-9

IUPAC Name: (2'Z,3'E)-6-Bromoindirubin-3'-oxime

Description:

Potent and selective, ATP-competitive glycogen synthase kinase-3 (GSK-3) inhibitor (IC₅₀ values are 5, 83, 300, 320 and > 10 000 nM at GSK-3, CDK5/p25, CDK2/cyclin A, CDK1/cyclin B and other common kinases respectively). Maintains self-renewal and pluripotency in embryonic stem cells via activation of the Wnt signaling pathway in vitro; also promotes proliferation and dedifferentiation in cardiomyocytes. Negative control available (Cat. No. 3873).

Physical and Chemical Properties:

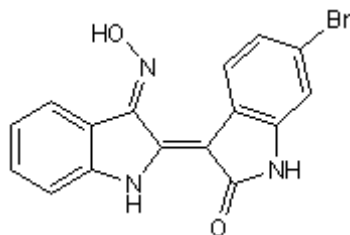
Batch Molecular Formula: C₁₆H₁₀BrN₃O₆·³/₄H₂O

Batch Molecular Weight: 369.68

Physical Appearance: Red solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Meijer et al (2003) GSK-3-selective inhibitors derived from tyrian purple indirubins. *Chem.Biol.* **10** 1255. PMID: 14700633.

Polychronopoulos et al (2004) Structural basis for the synthesis of indirubins as potent and selective inhibitors of glycogen synthase kinase-3 and cyclin dependent kinases. *J.Med.Chem.* **47** 935. PMID: 14761195.

Tseng et al (2006) The GSK-3 inhibitor BIO promotes proliferation in mammalian cardiomyocytes. *Chem.Biol.* **13** 957. PMID: 16984885.

Storage: Store at +4°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 10 mM

ethanol to 10 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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Tocris Bioscience is an R&D Systems company

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