

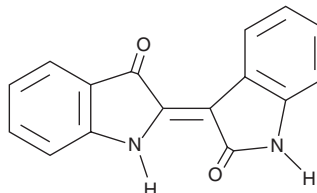
# PRODUCT INFORMATION



## Indirubin

Item No. 14155

**CAS Registry No.:** 479-41-4  
**Formal Name:** 3-(1,3-dihydro-3-oxo-2H-indol-2-ylidene)-1,3-dihydro-2H-indol-2-one  
**Synonyms:** C.I. 73200, Couroupitine B, Indigopurpurin, NSC 105327  
**MF:** C<sub>16</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>  
**FW:** 262.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 241, 289, 360 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Indirubin is supplied as a crystalline solid. A stock solution may be made by dissolving the indirubin in the solvent of choice, which should be purged with an inert gas. Indirubin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of indirubin in these solvents is approximately 1 mg/ml.

### Description

Indirubin is a natural product originally extracted from roots and leaves of the Indigo plant (*I. tinctoria*) used in traditional Chinese medicine for anti-inflammatory, anti-tumor, and neuroprotective effects. Indirubin inhibits glycogen synthase kinase-3 (IC<sub>50</sub> = 2.5 μM) and cyclin-dependent kinases 1 and 5 (IC<sub>50</sub> = 10 μM for both isoforms).<sup>1-3</sup>

### References

1. Ferandin, Y., Bettayeb, K., Kritsanida, M., *et al.* 3'-Substituted 7-halogenoindirubins, a new class of cell death inducing agents. *J. Med. Chem.* **49**(15), 4638-4649 (2006).
2. Guengerich, F.P., Sorrells, J.L., Schmitt, S., *et al.* Generation of new protein kinase inhibitors utilizing cytochrome P450 mutant enzymes for indigoid synthesis. *J. Med. Chem.* **47**(12), 3236-3241 (2004).
3. McGovern, S.L. and Shoichet, B.K. Kinase inhibitors: Not just for kinases anymore. *J. Med. Chem.* **46**(8), 1478-1483 (2003).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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