

Indirubin

Inhibitor of CDK and GSK

Inhibitor of cyclin-dependent kinases (CDK1/cyclin B (IC_{50} =10 μ M), CDK2/cyclin A (IC_{50} =2.2 μ M), CDK2/cyclin E (IC_{50} =7.5 μ M), CDK4/cyclin D1 (IC_{50} =12 μ M), CDK5/p35 (IC_{50} =5.5 μ M)) and of GSK-3 β (IC_{50} =600nM). Inhibits inflammatory reaction in delayed-type hypersensitivity in mice. Ligand of human aryl hydrocarbon receptor. Exhibits anti-cancer activity.

Indirubin is derived from various natural sources, such as *Indigofera indica*, *Isatis tinctoria* and *I. indigotica* by fermentation, oxidation and the presence of light as a by product of indigo formation. Indirubin is also present in human urine and fetal bovine serum. Preclinical studies of indirubin confirmed its anti-tumor activity. Efficacy against chronic myelocytic leukemia was demonstrated in clinical trials in China.

Citations: 8

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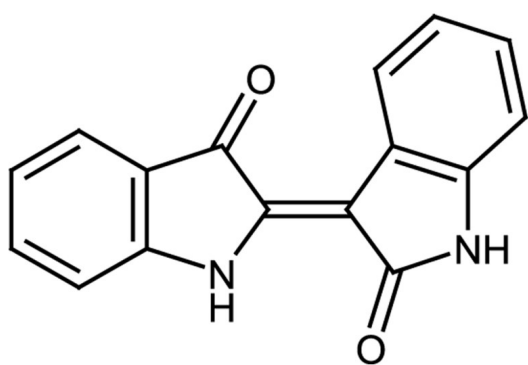
Ordering Information

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ALX-270-361-M001	1mg
ALX-270-361-M005	5mg

Manuals, SDS & CofA

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Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended. Stable for at least 2 years when stored at +4°C in the dark. Stock solutions should be stored in the dark and used within 1 month.
Handling	Protect from light. Keep cool and dry.
Long Term Storage	+4°C
Shipping	Ambient Temperature

Regulatory Status

RUO - Research Use Only

Product Details

Appearance	Purple powder.
CAS	479-41-4
Couple Target	CDK, GSK
Couple Type	Inhibitor
Formula	$C_{16}H_{10}N_2O_2$
MW	262.3
Purity	≥97% (HPLC)
Solubility	Soluble in DMSO (10mg/ml) or methanol (0.3mg/ml); sparingly soluble in aqueous buffers (12.5µg/ml).
Source	Synthetic.

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ENZO LIFE SCIENCES,
INC.
Phone: 800.942.0430
[info-
usa@enzolifesciences.com](mailto:info-usa@enzolifesciences.com)

European Sales Office
ENZO LIFE SCIENCES
(ELS) AG
Phone: +41 61 926 8989
[info-
eu@enzolifesciences.com](mailto:info-eu@enzolifesciences.com)

Belgium, The Netherlands
& Luxembourg
Phone: +32 3 466 0420
[info-
be@enzolifesciences.com](mailto:info-be@enzolifesciences.com)

France
Phone: +33 472 440 655
[info-
fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

Germany
Phone: +49 7621 5500 526
[info-
de@enzolifesciences.com](mailto:info-de@enzolifesciences.com)

UK & Ireland
Phone (UK customers):
0845 601 1488
Phone: +44 1392 825900
[info-
uk@enzolifesciences.com](mailto:info-uk@enzolifesciences.com)