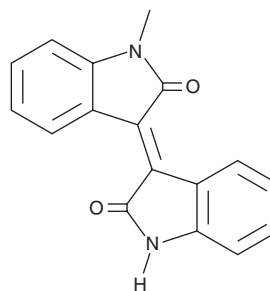


PRODUCT INFORMATION



Meisoindigo Item No. 18007

CAS Registry No.: 97207-47-1
Formal Name: 3-(1,2-dihydro-2-oxo-3H-indol-3-ylidene)-1,3-dihydro-1-methyl-2H-indol-2-one
Synonym: Methylisoindigotin
MF: C₁₇H₁₂N₂O₂
FW: 276.3
Purity: ≥95%
UV/Vis.: λ_{max}: 270, 388 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

Meisoindigo is supplied as a crystalline solid. A stock solution may be made by dissolving the meisoindigo in the solvent of choice, which should be purged with an inert gas. Meisoindigo is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of meisoindigo in these solvents is approximately 1 and 16 mg/ml, respectively.

Meisoindigo is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, meisoindigo should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Meisoindigo has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Meisoindigo is a derivative of indirubin (Item No. 14155) that has anticancer activity.¹ It inhibits the growth of NB4, HL-60, and U937 leukemia and primary acute myeloid leukemia (AML) cells when used at concentrations of 5 and 10 μM. It also halts the cell cycle at the G₀/G₁ phase and induces apoptosis in leukemia cell lines and primary AML cells, induces myeloid differentiation, and potentiates the effects of cytarabine (Item No. 16069) and idarubicin (Item No. 14176). Meisoindigo (10 μM) also induces apoptosis, decreases adherence, and decreases the expression of vascular cell adhesion molecule-1 (VCAM-1) in ECV304 human vein endothelial cells.² Meisoindigo (50-150 mg/kg per day) decreases spleen size in an HL-60 mouse xenograft model of AML in a dose-dependent manner.

References

1. Lee, C.-C., Lin, C.-P., Lee, Y.-L., *et al.* Meisoindigo is a promising agent with *in vitro* and *in vivo* activity against human acute myeloid leukemia. *Leuk. Lymphoma* **51(5)**, 897-905 (2010).
2. Xiao, Z., Wang, Y., Lu, L., *et al.* Anti-angiogenesis effects of meisoindigo on chronic myelogenous leukemia *in vitro*. *Leuk. Res.* **30(1)**, 54-59 (2006).

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.

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