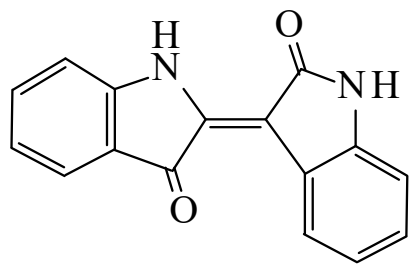
>>**Entry Name: Indirubin**

Synonym(s): 3-(1,3-Dihydro-3-oxo-2*H*-indol-2-ylidene)-1,3-dihydro-2*H*-indol-2-one, $_{9Cl}$. $\Delta^{2,3'}$-Biindoline-2',3-dione. Couroupitine B. Indigo red. C.I. 75790



CAS Registry Number: 479-41-4

Molecular Formula: $C_{16}H_{10}N_2O_2$
Molecular Weight: 262.267
Accurate Mass: 262.074228
Percentage Composition: C 73.27%; H 3.84%; N 10.68%; O 12.20%
Biological Source: Alkaloid from *Indigofera* spp. as minor constit. of indigo and *Couroupita guianensis* (Leguminosae, Lecythidaceae). Isol. from the fungal pigment of a *Schizophyllum commune* mutant
Biological Use/Importance: Inhibitor of Lewis lung carcinoma and Walker 256 carcinosarcoma in mice
Physical Description: Red cryst.
Solubility: BERDY SOL: Sol. EtOH, AcOH; poorly sol. H_2O, hexane
UV: [neutral] λ_{max} 522 (); 561 () (xylene) [neutral] λ_{max} 207 (); 239 (); 290 (); 360 (); 540 () (MeOH) (Berdy)
Other Data: Mp >400°. Sublimes

>>**Derivative:** 1,1'-Di-Ac

Molecular Formula: $C_{20}H_{14}N_2O_4$
Molecular Weight: 346.342
Accurate Mass: 346.095358
Percentage Composition: C 69.36%; H 4.07%; N 8.09%; O 18.48%
Melting Point: Mp 192-193°

>>**Derivative:** Oxime

Molecular Formula: $C_{16}H_{11}N_3O_2$
Molecular Weight: 277.282
Accurate Mass: 277.085127
Percentage Composition: C 69.31%; H 4.00%; N 15.15%; O 11.54%
Melting Point: Mp 246°

References:

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Epstein, E. *et al.*, *CA*, 1966, **66**, 102443, *(isol)*
Plieninger, D.W. *et al.*, *Chem. Ber.*, 1966, **99**, 3063
Sen, A.K. *et al.*, *Tet. Lett.*, 1974, 609, *(isol)*
Bergmann, J. *et al.*, *Tet. Lett.*, 1977, 2625, *(struct)*
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