

D-64131

Catalog No: tcsc1008



Available Sizes

Size: 10mg

Size: 50mg



Specifications

CAS No:

74588-78-6

Formula:

$C_{16}H_{13}NO_2$

Pathway:

Cell Cycle/DNA Damage;Cytoskeleton

Target:

Microtubule/Tubulin;Microtubule/Tubulin

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 100 mg/mL (397.96 mM)

Observed Molecular Weight:

251.28

Product Description

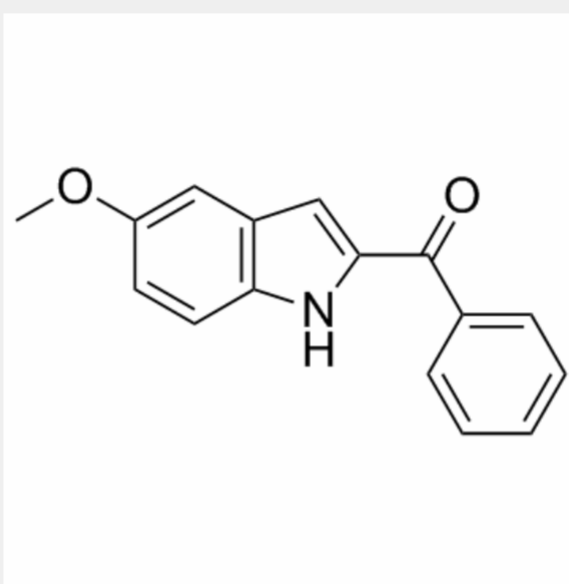
D-64131 is a novel inhibitor of Tubulin polymerization that competitively binds with [(3)H]colchicine to $\alpha\beta$ -Tubulin.

IC50 Value: N/A

Target: Microtubule/Tubulin

in vitro: D-64131 is cytotoxic and inhibits tumor cell proliferation in vitro (IC₅₀ = 74 nM). D-64131 prevents growth of tumor models in mice following oral administration in vivo. D-64131 has significant potential in cancer treatment. The proliferation of tumor cells from 12 of 14 different organs and tissues was inhibited with mean IC(50)s of 62 nM by D-64131.

in vivo: In animal studies, no signs of systemic toxicity were observed after p.o. dosages of up to 400 mg/kg of D-64131. In xenograft experiments with the human amelanotic melanoma MEXF 989, D-64131 was highly active with treatment resulting in a growth delay of 23.4 days at 400 mg/kg. Therefore, D-64131 and analogues have the potential to be developed for cancer therapy, replacing or supplementing standard therapy regimens with tubulin-targeting drugs from natural sources.



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