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Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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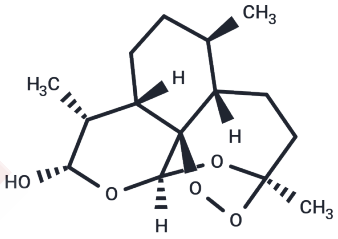
Data Sheet (Cat.No.T0607)

TargetMol

Dihydroartemisinin

Chemical Properties



CAS No. : 71939-50-9

Formula: C15H24O5

Molecular Weight: 284.35

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Dihydroartemisinin (Artenimol) is a metabolite of artemisinin.
Targets(IC50)	Apoptosis,NF-κB,Parasite,Autophagy
In vitro	Dihydroartemisinin (DHA) inhibits the growth of certain cancer cell lines and xenograft tumors such as leukemia, glioma, fibrosarcoma, and breast, cervical, ovarian, lung, oral and pancreatic cancer. DHA inhibits cell and tumor growth by modulating various tumor-suppressive pathways, such as inhibiting cell proliferation and inducing apoptosis through regulation of proliferation- and apoptosis-related proteins.DHA inhibits the proliferation and viability of cells in a dose-dependent manner and induces apoptosis.DHA-mediated cytotoxicity is tumor selective. The endoperoxide bridge of DHA is reportedly essential for its cytotoxicity because it reacts with intracellular ferrous iron to generate reactive oxygen species or carbon-centered radicals, leading to cytotoxicity[1].
In vivo	DHA significantly inhibited HCC cell growth in vitro and in vivo via inducing G2/M cell cycle arrest and apoptosis[2]. DHA has been shown in the rat whole embryo culture (WEC) to primarily affect primitive red blood cells (RBCs) causing subsequent tissue damage and dysmorphogenesis[3].
Cell Research	BxPc3-RFP cells (3.5×104cells/well) were seeded in poly D-lysine-coated black, μClear 96-well plates with 0.2 ml medium. After 24 h, the cells were treated with dimethyl sulfoxide (DMSO) (control) or different concentrations (2.5, 10, 40, or 80 μM) of DHA dissolved in DMSO for 24, 48, and 72 h. At each time point, the fluorescence intensity emitted from cells was measured. (Only for Reference)

Solubility Information

Solubility	Ethanol: 9 mg/mL (31.7 mM), H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 8.13 mg/mL (28.57 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.5168 mL	17.584 mL	35.1679 mL
5 mM	0.7034 mL	3.5168 mL	7.0336 mL
10 mM	0.3517 mL	1.7584 mL	3.5168 mL
50 mM	0.0703 mL	0.3517 mL	0.7034 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Liu W, Zheng M, Zhang R, et al.RNF126-Mediated MRE11 Ubiquitination Activates the DNA Damage Response and Confers Resistance of Triple-Negative Breast Cancer to Radiotherapy.Advanced Science.2022: 2203884.