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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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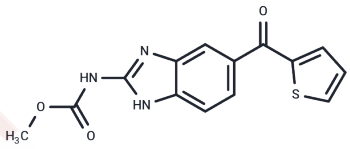
Data Sheet (Cat.No.T2802)

TargetMol

Nocodazole

Chemical Properties



CAS No. : 31430-18-9

Formula: C14H11N3O3S

Molecular Weight: 301.32

Appearance: no data available

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

Biological Description

Description	Nocodazole (Oncodazole) is a reversible inhibitor of microtubule polymerization and an inhibitor of Bcr-Abl. Nocodazole has antitumor activity, blocks the cell cycle and induces apoptosis.
Targets(IC50)	Apoptosis,Microtubule Associated,Bcr-Abl,Autophagy,CRISPR/Cas9
In vitro	**METHODS**: Erythrocytes were treated with Nocodazole (15-60 μg/mL) for 48 h. Phosphatidylserine was detected using Annexin-V-FITC. **RESULTS**: Nocodazole treatment increased the percentage of phosphatidylserine exposed to erythrocytes, reaching statistical significance at 30 μg/mL. [1] **METHODS**: hESCs cells were treated with Nocodazole (100 ng/mL) for 16 h and cell cycle profiles were analyzed using Flow Cytometry. **RESULTS**: Nocodazole treatment synchronized the cell cycle (>90% of cells in G2/M), while cells remained synchronized after release and moved evenly through the cell cycle for 24 h. At 2 h after removal of Nocodazole, the cells entered the G1 phase, with 70% of the cells in the G1 phase after 4 h, and 80% in the S phase after 12 h. The cells were treated with Nocodazole (100 ng/mL) for 16 h, and the cell cycle was analyzed by Flow Cytometry. [2]
In vivo	**METHODS**: To detect anti-tumor activity in vivo, Nocodazole (12 mg/kg three times a week) and dexamethasone (2 mg/kg twice a week) were injected intraperitoneally for fifteen days into immunodeficient mice bearing myeloma H929. **RESULTS**: Nocodazole in combination with dexamethasone significantly inhibited myeloma tumor growth and prolonged survival. [3] **METHODS**: To study the effects on intestinal mucositis, Nocodazole (5 mg/kg) and ketoconazole (50 mg/kg) were administered intraperitoneally three times a week for six weeks to nude mice harboring the human colorectal cancer tumor COLO 205. **RESULTS**: The antitumor effect of Nocodazole was significantly enhanced after six weeks of ketoconazole treatment. [4]
Cell Research	Nocodazole is dissolved in a final concentration of 0.05% DMSO. Proteins are loaded at 50 μg/lane and separated by 12% (w:v) sodium dodecyl sulfate-polyacrylamide gel electrophoresis, blotted, and probed with antibodies for cyclin E, p53, p21/CIP1, p27/KIP1, glyceraldehyde 3-phosphate dehydrogenase (GAPDH), cyclin A, cyclin D1, cyclin D3, cyclin B, CDK2, CDK4, and cytochrome C. Immunoreactive bands are visualized by incubating with the colorigenic substrates nitroblue tetrazolium and 5-bromo-4-chloro-3-indolyl-phosphate. The expression of GAPDH is used as the control for equal

protein loading.

Solubility Information

Solubility	DMSO: 12.5 mg/mL (41.48 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3187 mL	16.5937 mL	33.1873 mL
5 mM	0.6637 mL	3.3187 mL	6.6375 mL
10 mM	0.3319 mL	1.6594 mL	3.3187 mL
50 mM	0.0664 mL	0.3319 mL	0.6637 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

Signoretto E, et al. Nocodazole Induced Suicidal Death of Human Erythrocytes. Cell Physiol Biochem. 2016;38(1): 379-92.