Product Information

- Name: Nocodazole (Oncodazole, 诺考达唑)
- CAS No. : 31430-18-9
- Molecular Formula: $C_{14}H_{11}N_3O_3S$ | Molecular Weight: 301.32 g/mol
- Appearance: White to off-white solid powder

Biological Activity

- Target and Mechanism: A rapidly-reversible microtubule inhibitor. It binds to β-tubulin and disrupts microtubule assembly/disassembly dynamics, which prevents mitosis and induces apoptosis in tumor cells. It also inhibits Bcr-Abl.

- In Vitro Applications: Used for cell cycle synchronization (arrests cells at G2/M phase) and to study microtubule-related processes. Common applications include:

- Cell cycle synchronization: 50-100 ng/mL for 12-18 hours.
- Induction of apoptosis / anti-proliferation studies: 0.1-5 μM for 24-72 hours.

Handling and Storage

- Storage: Powder: Store at -20°C.

- Solution (in DMSO): Store at -80°C for up to 6 months, or at -20°C for up to 1 month. Avoid repeated freeze-thaw cycles.
- Solubility: Soluble in DMSO (e.g., 10 mM * 1 mL stock solution available).

Precautions

- This product is for research use only and must not be used for clinical diagnosis or treatment.
- Nocodazole is a bioactive compound. Always wear appropriate personal protective equipment (gloves, lab coat, goggles) and handle it in a fume hood. Follow standard laboratory safety regulations for chemical handling and waste disposal.