

Nocodazole

Cat. # F6120, F6121

Also Known as: N-[6-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-methyl ester-carbamic acid

Formula: $C_{14}H_{11}N_3O_3S$

MW: 301.32 Da

CAS No.: 31430-18-9

Source: Synthetic

Form: Lyophilized powder

Solubility: Soluble in DMSO (~10 mg/mL)

Concentration: N/A

Quality Assurance: >99% by HPLC and NMR

Description: Nocodazole is a microtubule inhibitor which reversibly binds tubulin and alters tubulin-associated GTP hydrolysis as well as microtubule dynamics. While nocodazole is used to study many aspects on microtubule function, it is most commonly used to synchronize cell cycling in culture. Nocodazole is also used to induce the formation of Golgi ministacks in eukaryotic cells.

Storage: Eligible for room temperature shipping. Store at -20°C upon receiving; protect from air and light

How to use Nocodazole was used at 40-100 ng/mL of culture medium for a duration of 12-18 hours in cell synchronization experiments.
For cell synchronization experiments, nocodazole is usually employed at a concentration of 40-100 ng/mL of culture medium for a duration of 12-18 hours. For inducing the formation of Golgi ministacks incubate in 33 μM nocodazole for 3 hours.

Literature:

1. Vasquez RJ, *et al.* (1997) Mol.Biol.Cell 8(6):973-85.
2. Mikhailov A, *et al.* (1998) Cell.Motil.Cytoskeleton 41(4):325-40.
3. Webb JL, *et al.* (2004) Int.J.Biochem.Cell Biol. 36(12):2541-50.
4. Mizushima N, *et al.* (2010) Cell 140(3):313-26

