



Catalog # 10-2387

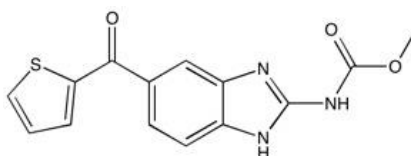
Nocodazole

CAS# 31430-18-9

R-17934

Methyl[5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]carbamate

Lot # X101816



An antimitotic agent that disrupts microtubules by binding to β tubulin and thereby inhibiting microtubule dynamics, disruption of mitotic spindle function, and fragmentation of the Golgi complex^{1,2}. Arrests cell cycle at G2/M phase. Stimulates the intrinsic GTPase activity of tubulin³. Activates the JNK/SAPK signaling pathway and induces apoptosis in a variety of cell lines⁴. Cell permeable.

- 1) Jordan *et al.* (1992), *Effects of vinblastine, podophyllotoxin and nocodazole on mitotic spindles. Implications for the role of microtubule dynamics in mitosis*; J. Cell Science, **102** 401
- 2) Storrie *et al.* (1998), *Dynamics of the interphase mammalian Golgi complex as revealed through drugs producing reversible Golgi disassembly*; Biochim. Biophys. Acta, **1404** 127
- 3) Mejillano *et al.* (1996), *Studies on the nocodazole-induced GTPase activity of tubulin*; Arch. Biochem. Biophys., **336** 130
- 4) Wang *et al.* (1998), *Microtubule-interfering agents activate c-Jun N-terminal kinase/stress-activated protein kinase through both Ras and apoptosis signal-regulating kinase pathways*; J. Biol. Chem., **273** 4928

PHYSICAL DATA

Molecular Weight:	301.32
Molecular Formula:	C ₁₄ H ₁₁ N ₃ O ₃ S
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 10 mg/ml with warming)
Physical Description:	White or off-white solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 2 months.

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