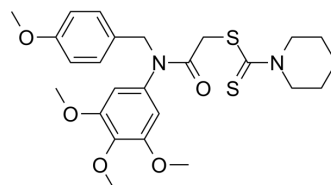


Tubulin/NEDDylation-IN-1

Cat. No.:	HY-163105		
Molecular Formula:	C ₂₅ H ₃₂ N ₂ O ₅ S ₂		
Molecular Weight:	504.66		
Target:	Microtubule/Tubulin		
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (198.15 mM; Need ultrasonic)				
	Preparing Stock Solutions	Solvent	1 mg	5 mg	10 mg
		Concentration			
		1 mM	1.9815 mL	9.9077 mL	19.8153 mL
		5 mM	0.3963 mL	1.9815 mL	3.9631 mL
	10 mM	0.1982 mL	0.9908 mL	1.9815 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (4.95 mM); Clear solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (4.95 mM); Clear solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 2.5 mg/mL (4.95 mM); Clear solution; Need ultrasonic 				

BIOLOGICAL ACTIVITY

Description	Tubulin/NEDDylation-IN-1 (compound C11) is a dual inhibitor of tubulin (Microtubule/Tubulin)-NEDDylation (IC ₅₀ for tubulin=2.40 μM), which has strong anti-proliferative activity. Neddylation is a protein post-translational modification that covalently tags the ubiquitin-like protein NEDD8 to target proteins. Tubulin/NEDDylation-IN-1 forms hydrogen bonds with residues of tubulin and E1 NEDD8 activating enzyme (NAE) through methoxy and dithiocarbamate groups and inhibits NEDDylation and microtubulin in an ATP-dependent manner. tube polymerization ^[1] .
IC₅₀ & Target	2.40 μM (Microtubule/Tubulin) ^[1]

REFERENCES

[1]. Fu DJ, et al. Discovery of dual tubulin-NEDDylation inhibitors with antiproliferative activity. J Enzyme Inhib Med Chem. 2023 Dec;38(1):166-175.

Caution: Product has not been fully validated for medical applications. For research use only.

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