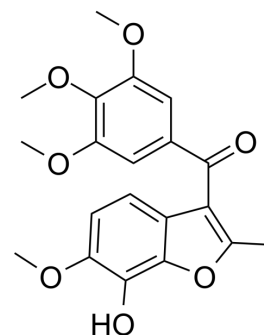


## BNC105

<b>Cat. No.:</b>	HY-16114		
<b>CAS No.:</b>	945771-74-4		
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>20</sub> O <sub>7</sub>		
<b>Molecular Weight:</b>	372.37		
<b>Target:</b>	Microtubule/Tubulin		
<b>Pathway:</b>	Cell Cycle/DNA Damage; Cytoskeleton		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 25 mg/mL (67.14 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
<b>Preparing Stock Solutions</b>	<b>1 mM</b>	2.6855 mL	13.4276 mL	26.8551 mL
	<b>5 mM</b>	0.5371 mL	2.6855 mL	5.3710 mL
	<b>10 mM</b>	0.2686 mL	1.3428 mL	2.6855 mL
Please refer to the solubility information to select the appropriate solvent.				
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: 2.5 mg/mL (6.71 mM); Suspended solution; Need ultrasonic and warming</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (6.71 mM); Suspended solution; Need ultrasonic and warming</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (6.71 mM); Clear solution</li> </ol>			

### BIOLOGICAL ACTIVITY

<b>Description</b>	BNC105 is a tubulin polymerization inhibitor with potent antiproliferative and tumor vascular disrupting properties.
<b>IC<sub>50</sub> &amp; Target</b>	BNC105 exhibited excellent potency against a panel of different cancer cell lines with IC <sub>50</sub> <1 nM for DU145, Calu-6, MDA-MB-231 etc. The selectivity observed for BNC105 against activated over quiescent HUVECs was also observed in human aortic arterial endothelial cells (HAAECs). BNC105 also exhibited good potency toward the cisplatin resistant cell line A2780cis.

- Biochem Biophys Res Commun. 2020 Feb 18;S0006-291X(20)30008-5.

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**REFERENCES**

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- [1]. Flynn BL, et al. Discovery of 7-hydroxy-6-methoxy-2-methyl-3-(3,4,5-trimethoxybenzoyl)benzo[b]furan (BNC105), a tubulin polymerization inhibitor with potent antiproliferative and tumor vascular disrupting properties. J Med Chem. 2011 Sep 8;54(17):6014-27.
- [2]. Kremmidiotis G, et al. BNC105: a novel tubulin polymerization inhibitor that selectively disrupts tumor vasculature and displays single-agent antitumor efficacy. Mol Cancer Ther. 2010 Jun;9(6):1562-73.
- [3]. Inglis DJ, et al. The vascular disrupting agent BNC105 potentiates the efficacy of VEGF and mTOR inhibitors in renal and breast cancer. Cancer Biol Ther. 2014;15(11):1552-60.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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