

产品名称: **N-[4-(2,4-Dimethylphenyl)-2-thiazolyl]benzamide**
 产品别名: **INH1**

生物活性:

Description	INH1 is a small molecule targeting the Hec1/Nek2 mitotic pathway suppresses tumor cell growth in culture and in animal. IC50 value: 10-21 uM (GI50 in human breast cancer cell lines) [1] Target: Hec1 inhibitor Treating cells with INH1 triggered reduction of kinetochore-bound Hec1 as well as global Nek2 protein level, consequently leading to metaphase chromosome misalignment, spindle aberrancy, and eventual cell death. INH1 effectively inhibited the proliferation of multiple human breast cancer cell lines in culture (GI(50), 10-21 micromol/L). Furthermore, treatment with INH1 retarded tumor growth in a nude mouse model bearing xenografts derived from the human breast cancer line MDA-MB-468, with no apparent side effects. This study suggests that the Hec1/Nek2 pathway may serve as a novel mitotic target for cancer intervention by small compounds.																	
Solvent&Solubility	<i>In Vitro:</i> DMSO : 100 mg/mL (324.25 mM; Need ultrasonic)																	
	<table><tr><td rowspan="4">Preparing Stock Solutions</td><td> Solvent / Mass / Concentration </td><td>1 mg</td><td>5 mg</td><td>10 mg</td></tr><tr><td>1 mM</td><td>3.2425 mL</td><td>16.2127 mL</td><td>32.4254 mL</td></tr><tr><td>5 mM</td><td>0.6485 mL</td><td>3.2425 mL</td><td>6.4851 mL</td></tr><tr><td>10 mM</td><td>0.3243 mL</td><td>1.6213 mL</td><td>3.2425 mL</td></tr></table>	Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg	1 mM	3.2425 mL	16.2127 mL	32.4254 mL	5 mM	0.6485 mL	3.2425 mL	6.4851 mL	10 mM	0.3243 mL	1.6213 mL	3.2425 mL
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	*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。 储备液的保存方式和期限：-80℃，6 months；-20℃，1 month。-80℃ 储存时，请在 6 个月内使用，-20℃ 储存时，请在 1 个月内使用。																	
	<i>In Vivo:</i> 请根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都请先按照 In Vitro 方式配制澄清的储备液，再依次添加助溶剂： ——为保证实验结果的可靠性，澄清的储备液可以根据储存条件，适当保存；体内实验的工作液，建议您现用现配，当天使用； 以下溶剂前显示的百分比是指该溶剂在您配制终溶液中的体积占比；如在配制过程中出现沉淀、析出现象，可以通过加热和/或超声的方式助溶																	
	1.请依序添加每种溶剂： 10% DMSO→40% PEG300 →5% Tween-80 → 45% saline Solubility: ≥ 2.5 mg/mL (8.11 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (8.11 mM，饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 400 μL PEG300 中，混合均匀；向上述体系中加入 50 μL Tween-80，混合均匀；然后继续加入 450 μL 生理盐水定容至 1 mL。																	
	2.请依序添加每种溶剂： 10% DMSO →90% corn oil Solubility: ≥ 2.5 mg/mL (8.11 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (8.11 mM，饱和度未知) 的澄清溶液，此方案不适用于实验周期在半个月以上的实验。 以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中，混合均匀。																	
References	[1]. Wu G. et al. Small molecule targeting the Hec1/Nek2 mitotic pathway suppresses tumor cell growth in culture and in animal. Cancer Res. 2008 Oct 15;68(20):8393-9.																	