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产品名称: 4-氨基-1-叔丁基-3-(1'-萘基)吡唑并[3,4-d]嘧啶
产品别名: 1-Naphthyl PP1; 1-NA-PP 1

生物活性:																					
Description	1-Naphthyl PP1(1-NA-PP 1) is a selective inhibitor of src family kinases v-Src and c-Fyn as well as the tyrosine kinase c-Abl (IC50 values are 1.0, 0.6, 0.6, 18 and 22 μM for v-Src, c-Fyn, c-Abl, CDK2 and CAMK II respectively). IC50 Value:1.0 uM (v-Src); 0.6 uM (c-Fyn); 18 uM (c-Abl) [1] Target: Src Family kinase 1-NA-PP1 was considerably more potent and showed distinct substituent effects at the pyrazolopyrimidine core. 1-NA-PP1 was cell-active, and potently blocked prostate cancer cell proliferation by inducing G2/M arrest. Overexpression of PKD1 or PKD3 almost completely reversed the growth arrest and the inhibition of tumor cell invasion caused by 1-NA-PP1, indicating that its anti-proliferative and anti-invasive activities were mediated through the inhibition of PKD. Interestingly, a 12-fold increase in sensitivity to 1-NA-PP1 could be achieved by engineering a gatekeeper mutation in the active site of PKD1, suggesting that 1-NA-PP1 could be paired with the analog-sensitive PKD1(M659G) for dissecting PKD-specific functions and signaling pathways in various biological systems [2].																				
	<p>In Vitro:</p> <p>DMSO : 12.5 mg/mL (39.38 mM; Need ultrasonic)</p> <table><tr><td rowspan="4">Preparing Stock Solutions</td><td><div>SolventMassConcentration</div></td><td>1 mg</td><td>5 mg</td><td>10 mg</td></tr><tr><td>1 mM</td><td>3.1507 mL</td><td>15.7535 mL</td><td>31.5070 mL</td></tr><tr><td>5 mM</td><td>0.6301 mL</td><td>3.1507 mL</td><td>6.3014 mL</td></tr><tr><td>10 mM</td><td>0.3151 mL</td><td>1.5753 mL</td><td>3.1507 mL</td></tr></table> <p>*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。</p> <p>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。</p> <p>In Vivo:</p> <p>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：</p> <p>——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</p> <p>1.请依序添加每种溶剂： 10% DMSO→40% PEG300 →5% Tween-80 → 45% saline</p> <p>Solubility: ≥ 1.25 mg/mL (3.94 mM); Clear solution</p> <p>此方案可获得 ≥ 1.25 mg/mL (3.94 mM, 饱和度未知) 的澄清溶液。</p> <p>以 1 mL 工作液为例，取 100 μL 12.5 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。</p> <p>2.请依序添加每种溶剂： 10% DMSO →90% corn oil</p> <p>Solubility: ≥ 1.25 mg/mL (3.94 mM); Clear solution</p> <p>此方案可获得 ≥ 1.25 mg/mL (3.94 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</p>					Preparing Stock Solutions	<div>SolventMassConcentration</div>	1 mg	5 mg	10 mg	1 mM	3.1507 mL	15.7535 mL	31.5070 mL	5 mM	0.6301 mL	3.1507 mL	6.3014 mL	10 mM	0.3151 mL	1.5753 mL
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Solvent&Solubility																					



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	<p>的实验。</p> <p>以 1 mL 工作液为例, 取 100 μL 12.5 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中, 混合均匀。</p>
References	<p>[1]. Bishop AC, et al. A chemical switch for inhibitor-sensitive alleles of any protein kinase. Nature. 2000 Sep 21;407(6802):395-401.</p> <p>[2]. Tandon M, et al. New pyrazolopyrimidine inhibitors of protein kinase d as potent anticancer agents for prostate cancer cells. PLoS One. 2013 Sep 23;8(9):e75601.</p>



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