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产品名称: KC7F2

产品别名: KC7F2

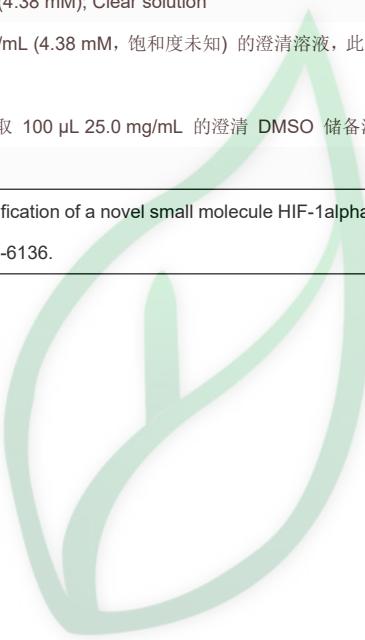
生物活性:

Description	KC7F2 is a potent hypoxia inducible factor-1 (HIF-1) pathway inhibitor with an IC50 of 20 μ M in LN229-HRE-AP cells, and with potential as a cancer therapy agent[1].			
IC ₅₀ & Target	IC50: 20 μ M (HIF-1, LN229-HRE-AP cells)[1]			
In Vitro	<p>KC7F2 (15–25 μM; 0-72 hours) exhibits a clear dose-response cytotoxicity with an IC50 value of approximately 15–25 μM depending on the cell lines, and this effect is more severe under hypoxic conditions[1].</p> <p>KC7F2 (0-80 μM; 6 hours) specifically reduces the protein levels of HIF-1α in a dose-dependent manner under hypoxic conditions; strongly decrease in HIF-1α levels at concentrations above 20 μM[1].</p> <p>KC7F2 does not affect the rate of HIF-1α protein degradation[1].</p> <p>KC7F2 inhibits HIF-1α protein synthesis but not its mRNA transcription[1].</p> <p>KC7F2 represses the phosphorylation of eukaryotic initiation factor 4E binding protein 1 (4EBP1)[1].</p>			
Cell Cytotoxicity Assay[1]				
Cell Line:	MCF7 cells, LNZ308 cells, A549 cells, U251MG cells, LN229 cells			
Concentration:	15–25 μ M			
Incubation Time:	0-72 hours			
Result:	With cytotoxicity more pronounced in tumor cell lines as compared to normal cells.			
Cell Viability Assay[1]				
Cell Line:	LN229 cells			
Concentration:	6 hours			
Incubation Time:	0 μ M, 5 μ M, 7.5 μ M, 10 μ M, 15 μ M, 20 μ M, 30 μ M, 40 μ M, 60 μ M, 80 μ M			
Result:	Decreases HIF-1 α protein levels in a dose-dependent manner.			
Solvent&Solubility	<p>In Vitro:</p> <p>DMSO : \geq 32 mg/mL (56.10 mM)</p> <p>* "\geq" means soluble, but saturation unknown.</p>			
Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.7532 mL	8.7661 mL	17.5322 mL
	5 mM	0.3506 mL	1.7532 mL	3.5064 mL
	10 mM	0.1753 mL	0.8766 mL	1.7532 mL
<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°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 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</p>				



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	<p>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: 2.5 mg/mL (4.38 mM); Clear solution; Need ultrasonic</p> <p>此方案可获得 2.5 mg/mL (4.38 mM) 的澄清溶液。</p> <p>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。</p> <p>2.请依序添加每种溶剂： 10% DMSO →90% corn oil</p> <p>Solubility: ≥ 2.5 mg/mL (4.38 mM); Clear solution</p> <p>此方案可获得 ≥ 2.5 mg/mL (4.38 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。</p> <p>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。</p>
References	[1]. Narita T, et al. Identification of a novel small molecule HIF-1alpha translation inhibitor. Clin Cancer Res. 2009 Oct 1;15(19):6128-6136.



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