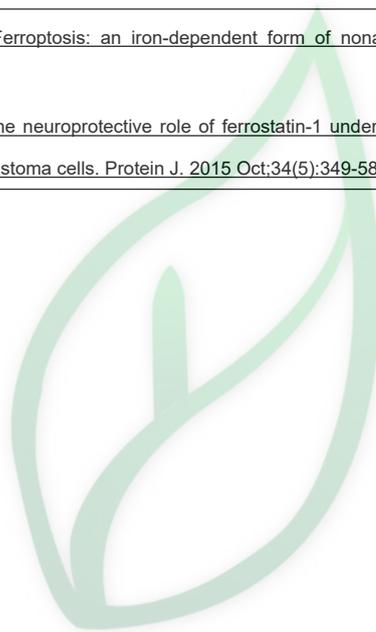


产品名称: **Ferrostatin-1 (Fer-1)**

产品别名: **Ferrostatin-1**

生物活性:					
<b>Description</b>	Ferrostatin-1 is a potent inhibitor of ferroptosis with an EC50 of 60 nM.				
<b>IC<sub>50</sub> &amp; Target</b>	EC50: 60 nM (Ferroptosis)[1]				
<b>In Vitro</b>	<p>Ferrostatin-1 is the most potent inhibitor of erastin-induced ferroptosis in HT-1080 cells (EC50=60 nM). Ferrostatin-1 does not inhibit ERK phosphorylation or arrest the proliferation of HT-1080 cells. Ferrostatin-1 does, however, prevent erastin-induced accumulation of cytosolic and lipid ROS[1]. Cells pretreated with 0.4 μM Ferrostatin-1 displays significantly reduce intracellular reactive oxygen species (ROS) and nitrogen species (RNS) below basal levels. Additionally, increased intracellular ROS levels are also significantly lowered below basal levels by a 0.4 μM Ferrostatin-1 pretreatment. Ferrostatin-1 treatment for 24 h does not change the expression level of i-NOS in SHSY-5Y cell when compare with vehicle (0.02 % DMSO) treated cells[2].</p>				
<b>Solvent&amp;Solubility</b>	<p><b>In Vitro:</b>  <b>DMSO : ≥ 150 mg/mL (571.76 mM)</b>                      * "&gt;" means soluble, but saturation unknown.</p>				
		Solvent Mass Concentration	1 mg	5 mg	10 mg
	<b>Preparing</b>	1 mM	3.8117 mL	19.0585 mL	38.1170 mL
	<b>Stock Solutions</b>	5 mM	0.7623 mL	3.8117 mL	7.6234 mL
		10 mM	0.3812 mL	1.9059 mL	3.8117 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。                      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><b>In Vivo:</b>                      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 <b>In Vitro</b> 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</p> <p>1.请依序添加每种溶剂: 10% DMSO→ 90% (20% SBE-β-CD in saline)                      Solubility: ≥ 2.5 mg/mL (9.53 mM); Clear solution                      此方案可获得 ≥ 2.5 mg/mL (9.53 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 900 μL 20% 的 SBE-β-CD 生理盐水水溶液中, 混合均匀。</p> <p>2.请依序添加每种溶剂: 10% DMSO →90% corn oil                      Solubility: ≥ 2.5 mg/mL (9.53 mM); Clear solution                      此方案可获得 ≥ 2.5 mg/mL (9.53 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。</p>					

<b>References</b>	<p>[1]. <a href="#">Dixon SJ, et al. Ferroptosis: an iron-dependent form of nonapoptotic cell death. Cell. 2012 May 25;149(5):1060-72.</a></p> <p>[2]. <a href="#">Kabiraj P, et al. The neuroprotective role of ferrostatin-1 under rotenone-induced oxidative stress in dopaminergic neuroblastoma cells. Protein J. 2015 Oct;34(5):349-58.</a></p>
<b>实验参考:</b>	
<b>Cell Assay</b>	<p>SH-S5Y cells are seeded in 24-well plates. After overnight incubation, the cells are exposed for 24 h to 1 <math>\mu</math>M of Ferrostatin-1, under standard growth conditions. Bright field photomicrographs are captured using an inverted microscope equipped with 10<math>\times</math> objective in a live-cell modality[2].</p>
<b>Kinase Assay</b>	<p>The cells treated for 24 h with Ferrostatin-1 are washed three times with phosphate-buffered saline (PBS) and pelleted by centrifugation. The supernatant is removed and 80 <math>\mu</math>L of lysis buffer is added to the cells and then stored overnight at -20°C. Subsequently, the cells are centrifuged at 10,000 RPM for 12 min and both the pellet and supernatant are stored for future use[2].</p>
<b>References</b>	<p>[1]. <a href="#">Dixon SJ, et al. Ferroptosis: an iron-dependent form of nonapoptotic cell death. Cell. 2012 May 25;149(5):1060-72.</a></p> <p>[2]. <a href="#">Kabiraj P, et al. The neuroprotective role of ferrostatin-1 under rotenone-induced oxidative stress in dopaminergic neuroblastoma cells. Protein J. 2015 Oct;34(5):349-58.</a></p>



源叶生物