

缺氧小分子化合物 Kit-1 说明书

货号: IK-HIF-1

保存: Powder: -20°C, 2 years;

In solve: -20°C, 1 month; -80°C, 6 months

产品简介:

缺氧常常使细胞无法分化。然而, 缺氧促进血管的形成, 并且对于胚胎中血管系统的形成和癌症肿瘤很重要。伤口缺氧也促进了角质形成细胞的迁移和上皮的修复。

缺氧诱导因子 1 (HIF-1) 是一种转录因子, 是氧稳态的主要调节因子。它由两个亚单位组成: 一个诱导表达的 HIF-1 α 亚单位和一个组成性表达的 HIF-1 β 亚单位。在常氧条件下, HIF-1 α 在特定的脯氨酰残基处发生羟基化, 导致亚单位立即泛素化和随后的蛋白酶体降解。在缺氧条件下, HIF-1 α 亚单位变得稳定, 并与 p300/CBP 等共激活因子相互作用以调节其转录活性。最终, HIF-1 在缺氧条件下充当许多缺氧诱导基因的主要调节因子。HIF-1 α 激活的基因包括: VEGF、GLUT1、LDHA 等, HIF-1 α 也可以被 ERK2 调节, ERK2 可以磷酸化 HIF-1 α 。此外, 缺氧还会诱导 p53 蛋白的积累。

本 Kit 精选了数种靶向 HIF/HIF Prolyl-Hydroxylase 的化合物, 可用于细胞氧感应相关的研究, 便于客户进行初筛等操作。客户也可根据自己的需求灵活定制专属 Kit。

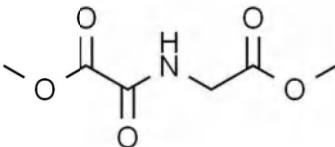


1. 具有良好的生物活性, 且为小包装规格, 可用于初筛、预实验、初步验证等操作
2. 靶向 HIF/HIF Prolyl-Hydroxylase
3. 可用于探索细胞氧感应相关的研究, 例如: 缺氧、氧化应激等
4. 客户可根据自己的实验需求灵活定制 Kit: 规格、套装组成、产品种类、数量、形式 (溶液/干粉) 均可定制。

化学信息:

Cat.	Product Name	CAS.	Formula	M. Wt
ID0540	DMOG; 二甲基乙二酰氨基乙酸	89464-63-1	C ₆ H ₉ NO ₅	175.14
IR0420	Roxadustat; 可博美	808118-40-3	C ₁₉ H ₁₆ N ₂ O ₅	352.34
IF0610	FG-2216	223387-75-5	C ₁₂ H ₉ ClN ₂ O ₄	280.66
II0840	IOX2	931398-72-0	C ₁₉ H ₁₆ N ₂ O ₅	352.34
IK0250	KC7F2	927822-86-4	C ₁₆ H ₁₆ Cl ₄ N ₂ O ₄ S ₄	570.38
IP1810	PX-478 2HCl	685898-44-6	C ₁₃ H ₂₀ Cl ₄ N ₂ O ₃	394.13
IO0960	Oltipraz; 吡噻硫酮	64224-21-1	C ₈ H ₆ N ₂ S ₃	226.34
IA4520	N-乙酰-L-胱氨酸	38520-57-9	C ₅ H ₁₀ N ₂ O ₂ S	162.21

生物学信息:

1. ID0540 DMOG 二甲基乙二酰氨基乙酸

Target	HIF/HIF Prolyl-Hydroxylase																			
Description	是竞争型的 HIF-1 α 脯氨酰羟化酶 (HIF-PH) 抑制剂。 It is a competitive HIF-1 α prolyl hydroxylase (HIF-PH) inhibitor.																			
溶解性 Solubility	In Vitro: Soluble in DMSO/Water <table border="1"><thead><tr><th rowspan="2">Solvent Concentration</th><th colspan="3">Mass</th></tr><tr><th>1 mg</th><th>5 mg</th><th>10 mg</th></tr></thead><tbody><tr><td>1 mM</td><td>5.7097 mL</td><td>28.5486 mL</td><td>57.0972 mL</td></tr><tr><td>5 mM</td><td>1.1419 mL</td><td>5.7097 mL</td><td>11.4194 mL</td></tr><tr><td>10 mM</td><td>0.5710 mL</td><td>2.8549 mL</td><td>5.7097 mL</td></tr></tbody></table> <p>* 产品为非无菌包装, 请根据实验需求提前做好预处理。一旦配成储备液, 建议分装保存, 避免反复冻融造成的产品失效。</p> <p>* The product is non-sterile packaging, please do pre-treatment in advance according to experimental needs. Once the stock solution is prepared, it is recommended to store in aliquots to avoid product failure caused by repeated freezing and thawing.</p>	Solvent Concentration	Mass			1 mg	5 mg	10 mg	1 mM	5.7097 mL	28.5486 mL	57.0972 mL	5 mM	1.1419 mL	5.7097 mL	11.4194 mL	10 mM	0.5710 mL	2.8549 mL	5.7097 mL
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2. IR0420 Roxadustat 可博美

Target	HIF/HIF Prolyl-Hydroxylase																		
Description	<p>是一种脯氨酰羟化酶 HIF 抑制剂。</p> <p>It is a HIF prolyl hydroxylase inhibitor</p>																		
溶解性 Solubility	<p>In Vitro:</p> <p>Soluble in DMSO</p> <table border="1" data-bbox="453 696 1361 1025"> <thead> <tr> <th data-bbox="453 696 730 837"> <div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Solvent</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Mass</div> </div> </th> <th data-bbox="730 696 940 837">1 mg</th> <th data-bbox="940 696 1149 837">5 mg</th> <th data-bbox="1149 696 1361 837">10 mg</th> </tr> </thead> <tbody> <tr> <td data-bbox="453 837 730 898">1 mM</td> <td data-bbox="730 837 940 898">2.8382 mL</td> <td data-bbox="940 837 1149 898">14.1908 mL</td> <td data-bbox="1149 837 1361 898">28.3817 mL</td> </tr> <tr> <td data-bbox="453 898 730 958">5 mM</td> <td data-bbox="730 898 940 958">0.5676 mL</td> <td data-bbox="940 898 1149 958">2.8382 mL</td> <td data-bbox="1149 898 1361 958">5.6763 mL</td> </tr> <tr> <td data-bbox="453 958 730 1025">10 mM</td> <td data-bbox="730 958 940 1025">0.2838 mL</td> <td data-bbox="940 958 1149 1025">1.4191 mL</td> <td data-bbox="1149 958 1361 1025">2.8382 mL</td> </tr> </tbody> </table> <p>* 产品为非无菌包装，请根据实验需求提前做好预处理。一旦配成储备液，建议分装保存，避免反复冻融造成的产品失效。</p> <p>* The product is non-sterile packaging, please do pre-treatment in advance according to experimental needs. Once the stock solution is prepared, it is recommended to store in aliquots to avoid product failure caused by repeated freezing and thawing.</p>			<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Solvent</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Mass</div> </div>	1 mg	5 mg	10 mg	1 mM	2.8382 mL	14.1908 mL	28.3817 mL	5 mM	0.5676 mL	2.8382 mL	5.6763 mL	10 mM	0.2838 mL	1.4191 mL	2.8382 mL
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3. IF0610 FG-2216

Target	PHD																			
Description	<p>是一种新型的，有效的 HIF 脯氨酰 4-羟化酶（PHD）抑制剂</p> <p>Is a new and effective HIF prolyl 4-hydroxylase (PHD) inhibitor</p>																			
溶解性 Solubility	<p>In Vitro:</p> <p>Soluble in DMSO</p> <table border="1"> <thead> <tr> <th rowspan="2">Concentration</th> <th colspan="3">Mass</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>3.5630 mL</td> <td>17.8151 mL</td> <td>35.6303 mL</td> </tr> <tr> <td>5 mM</td> <td>0.7126 mL</td> <td>3.5630 mL</td> <td>7.1261 mL</td> </tr> <tr> <td>10 mM</td> <td>0.3563 mL</td> <td>1.7815 mL</td> <td>3.5630 mL</td> </tr> </tbody> </table> <p>* 产品为非无菌包装，请根据实验需求提前做好预处理。一旦配成储备液，建议分装保存，避免反复冻融造成的产品失效。</p> <p>* The product is non-sterile packaging, please do pre-treatment in advance according to experimental needs. Once the stock solution is prepared, it is recommended to store in aliquots to avoid product failure caused by repeated freezing and thawing.</p>	Concentration	Mass			1 mg	5 mg	10 mg	1 mM	3.5630 mL	17.8151 mL	35.6303 mL	5 mM	0.7126 mL	3.5630 mL	7.1261 mL	10 mM	0.3563 mL	1.7815 mL	3.5630 mL
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4. II0840 IOX2

Target	PHD2																			
Description	IOX2 是一种特异性的脯氨酰羟化酶-2 (PHD2) 抑制剂。 IOX2 is a specific prolyl hydroxylase-2 (PHD2) inhibitor.																			
溶解性 Solubility	<p>In Vitro: Soluble in DMSO</p> <table border="1"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th colspan="3">Mass</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>2.8382 mL</td> <td>14.1908 mL</td> <td>28.3817 mL</td> </tr> <tr> <td>5 mM</td> <td>0.5676 mL</td> <td>2.8382 mL</td> <td>5.6763 mL</td> </tr> <tr> <td>10 mM</td> <td>0.2838 mL</td> <td>1.4191 mL</td> <td>2.8382 mL</td> </tr> </tbody> </table> <p>* 产品为非无菌包装，请根据实验需求提前做好预处理。一旦配成储备液，建议分装保存，避免反复冻融造成的产品失效。 * The product is non-sterile packaging, please do pre-treatment in advance according to experimental needs. Once the stock solution is prepared, it is recommended to store in aliquots to avoid product failure caused by repeated freezing and thawing.</p>	Solvent Concentration	Mass			1 mg	5 mg	10 mg	1 mM	2.8382 mL	14.1908 mL	28.3817 mL	5 mM	0.5676 mL	2.8382 mL	5.6763 mL	10 mM	0.2838 mL	1.4191 mL	2.8382 mL
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5. IK0250 KC7F2

Target	HIF-1 α																			
Description	<p>是一种选择性 HIF-1α蛋白翻译抑制剂。</p> <p>It is a selective HIF-1α protein translation inhibitor.</p>																			
溶解性 Solubility	<p>In Vitro:</p> <p>Soluble in DMSO</p> <table border="1" data-bbox="454 660 1364 985"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th colspan="3">Mass</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>1.7532 mL</td> <td>8.7661 mL</td> <td>17.5322 mL</td> </tr> <tr> <td>5 mM</td> <td>0.3506 mL</td> <td>1.7532 mL</td> <td>3.5064 mL</td> </tr> <tr> <td>10 mM</td> <td>0.1753 mL</td> <td>0.8766 mL</td> <td>1.7532 mL</td> </tr> </tbody> </table> <p>* 产品为非无菌包装，请根据实验需求提前做好预处理。一旦配成储备液，建议分装保存，避免反复冻融造成的产品失效。</p> <p>* The product is non-sterile packaging, please do pre-treatment in advance according to experimental needs. Once the stock solution is prepared, it is recommended to store in aliquots to avoid product failure caused by repeated freezing and thawing.</p>	Solvent Concentration	Mass			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
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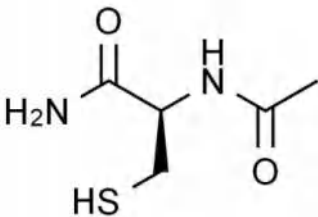
6. IP1810 PX-478 2HCl

Target	HIF-1 α																			
Description	<p>PX-478 是有抗癌活性的缺氧诱导因子-1α (HIF-1α) 抑制剂。</p> <p>PX-478 is a hypoxia-inducible factor-1α (HIF-1α) inhibitor with anticancer activity.</p>																			
溶解性 Solubility	<p>In Vitro: Soluble in DMSO/Water</p> <table border="1" data-bbox="454 716 1364 1041"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th colspan="3">Mass</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>2.5373 mL</td> <td>12.6865 mL</td> <td>25.3730 mL</td> </tr> <tr> <td>5 mM</td> <td>0.5075 mL</td> <td>2.5373 mL</td> <td>5.0746 mL</td> </tr> <tr> <td>10 mM</td> <td>0.2537 mL</td> <td>1.2686 mL</td> <td>2.5373 mL</td> </tr> </tbody> </table> <p>* 产品为非无菌包装，请根据实验需求提前做好预处理。一旦配成储备液，建议分装保存，避免反复冻融造成的产品失效。</p> <p>* The product is non-sterile packaging, please do pre-treatment in advance according to experimental needs. Once the stock solution is prepared, it is recommended to store in aliquots to avoid product failure caused by repeated freezing and thawing.</p>	Solvent Concentration	Mass			1 mg	5 mg	10 mg	1 mM	2.5373 mL	12.6865 mL	25.3730 mL	5 mM	0.5075 mL	2.5373 mL	5.0746 mL	10 mM	0.2537 mL	1.2686 mL	2.5373 mL
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7. IO0960 Oltipraz 吡噻硫酮

Target	HIF-1 α																												
Description	<p>Oltipraz 可以抑制 HIF-1α 激活。</p> <p>Oltipraz can inhibit HIF-1α activation.</p>																												
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8. IA4520 N-乙酰-L-胱氨酸 N-AcetylcysteineAmide

Target	HIF; NF-κB;ROS																
Description	<p>是一种抗氧化剂，具有消炎活性，能够调节 NF-κB 的激活、HIF-1α和 ROS。</p> <p>It is an antioxidant with anti-inflammatory activity and can regulate the activation of NF-κB, HIF-1α and ROS.</p>																
<p>溶解性</p> <p>Solubility</p>	<p>In Vitro:</p> <p>Soluble in DMSO/Water</p> <table border="1" data-bbox="453 779 1361 1106"> <thead> <tr> <th data-bbox="453 779 730 920"> <div style="display: flex; flex-direction: column; align-items: center;"> Solvent Concentration </div> <div style="display: flex; flex-direction: row; align-items: center;"> Mass </div> </th> <th data-bbox="730 779 940 920">1 mg</th> <th data-bbox="940 779 1149 920">5 mg</th> <th data-bbox="1149 779 1361 920">10 mg</th> </tr> </thead> <tbody> <tr> <td data-bbox="453 920 730 981">1 mM</td> <td data-bbox="730 920 940 981">6.1648 mL</td> <td data-bbox="940 920 1149 981">30.8242 mL</td> <td data-bbox="1149 920 1361 981">61.6485 mL</td> </tr> <tr> <td data-bbox="453 981 730 1041">5 mM</td> <td data-bbox="730 981 940 1041">1.2330 mL</td> <td data-bbox="940 981 1149 1041">6.1648 mL</td> <td data-bbox="1149 981 1361 1041">12.3297 mL</td> </tr> <tr> <td data-bbox="453 1041 730 1106">10 mM</td> <td data-bbox="730 1041 940 1106">0.6165 mL</td> <td data-bbox="940 1041 1149 1106">3.0824 mL</td> <td data-bbox="1149 1041 1361 1106">6.1648 mL</td> </tr> </tbody> </table> <p>* 产品为非无菌包装，请根据实验需求提前做好预处理。一旦配成储备液，建议分装保存，避免反复冻融造成的产品失效。</p> <p>* The product is non-sterile packaging, please do pre-treatment in advance according to experimental needs. Once the stock solution is prepared, it is recommended to store in aliquots to avoid product failure caused by repeated freezing and thawing.</p>	<div style="display: flex; flex-direction: column; align-items: center;"> Solvent Concentration </div> <div style="display: flex; flex-direction: row; align-items: center;"> Mass </div>	1 mg	5 mg	10 mg	1 mM	6.1648 mL	30.8242 mL	61.6485 mL	5 mM	1.2330 mL	6.1648 mL	12.3297 mL	10 mM	0.6165 mL	3.0824 mL	6.1648 mL
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<div style="display: flex; justify-content: space-around; align-items: center;"> <div data-bbox="437 1608 756 1823">  <p>Chemical structure of N-AcetylcysteineAmide: <chem>CC(=O)N[C@@H](CS)C(=O)N</chem></p> </div> <div data-bbox="836 1547 1177 1890">  <p>Solarbio LIFE SCIENCES</p> </div> </div>																	

Note:

1. 产品信息仅供参考，如有疑问请致电 400-968-6088 咨询。
 2. 本产品仅供科研使用。请勿用于医药、临床诊断或治疗，食品及化妆品等用途。
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