

## Product Data Sheet

Cas No.:	266359-83-5		Cat. No.:	PC10642
Product Name:	Reparixin			
Product synonym:	瑞帕利辛			
Chemical name:	Reparixin			
MF:	C14H21NO3S		FW:	283.3864
Purity:	≥98%		Batch No.:	-
Storage:				
Structural formula:				
λmax:	-		Formulation:	-
Solubility :				
SMILES :	<chem>S([H])([H])[H](N([H])C([C@]([H])(C([H])([H])[H])C1C([H])=C([H])C(=C([H])C=1[H])C([H])C([H])(C([H])([H])[H])C([H])([H])[H])=O)(=O)=O</chem>			
InChI Code:	-			
InChI Key:				
<b>WARNING This product is not for human or veterinary use.</b>				

### Product Description

CXCL8受体和CXCR1/CXCR2活化的抑制剂,Reparixin是趋化因子受体 CXCR1 和 CXCR2 激活的非竞争性变构抑制剂, IC<sub>50</sub> 分别为1 和 100 nM。瑞帕利辛 Reparixin是CXCL8诱导的人PMN生物活性的有效功能抑制剂, 对CXCR1具有显着的选择性(约400倍), 如CXCR1 / L1.2和CXCR2 / L1.2转染细胞和人类的特异性实验所示中性粒细胞

生物活性	Reparixin is a non-competitive allosteric inhibitor of the chemokine receptors <b>CXCR1</b> and <b>CXCR2</b> activation with <b>IC<sub>50</sub>s</b> of 1 and 100 nM, respectively.			
IC <sub>50</sub> & Target <sup>[1][2]</sup>	CXCR1 5.6 nM (IC <sub>50</sub> , in L1.2 cells)	CXCR1 80 nM (IC <sub>50</sub> , in L1.2 cells)	CXCR1 1 nM (IC <sub>50</sub> , in cells)	CXCR2 ~100 nM (IC <sub>50</sub> , in cells)

体外研究(In Vitro)	<p>Reparixin is a potent functional inhibitor of CXCL8-induced biological activities on human PMNs with a marked selectivity (around 400-fold) for CXCR1, as shown in specific experiments on CXCR1/L1.2 and CXCR2/L1.2 transfected cells and on human PMNs. The efficacy of Reparixin is significantly lower in L1.2 cells expressing Ile43Val CXCR1 mutant (<math>IC_{50}</math> values of 5.6 nM and 80 nM for CXCR1 wt and CXCR1 Ile43Val, respectively). Reparixin is a non-competitive allosteric inhibitor of IL-8 receptors with a 400-fold higher efficacy in inhibiting CXCR1 activity than CXCR2.</p> <p><b>Medlife has not independently confirmed the accuracy of these methods. They are for reference only.</b></p>																							
体内研究(In Vivo)	<p>Reparixin is an inhibitor of CXCL8 receptor CXCR1 and CXCR2 activation, has been shown to attenuate inflammatory responses in various injury models. Spontaneously hypertensive rats (SHR) are administered a subcutaneous injection of Reparixin (5 mg/kg) daily for 3 weeks. Reparixin effectively decreases systolic blood pressure and increased the blood flow. Reparixin reduces the levels of IL-1<math>\beta</math> in the brain after middle cerebral artery occlusion/reperfusion (MCAo) in mice. Bars represent levels of IL-1<math>\beta</math> (pg/100 mg) measured by ELISA in the brain tissues of mice subjected or not (SHAM) to MCAo and pretreated with vehicle or Reparixin (30 mg/kg, s.c.).</p> <p><b>Medlife has not independently confirmed the accuracy of these methods. They are for reference only.</b></p>																							
包装储存	<table border="1"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	6 months		-20°C	1 month											
Powder	-20°C	3 years																						
	4°C	2 years																						
In solvent	-80°C	6 months																						
	-20°C	1 month																						
	<p><b>体外研究:</b></p> <p>DMSO : <math>\geq</math> 100 mg/mL (352.87 mM)</p> <p>H<sub>2</sub>O : &lt; 0.1 mg/mL (insoluble)</p> <p>* "<math>\geq</math>" means soluble, but saturation unknown.</p> <table border="1"> <thead> <tr> <th rowspan="2">配制储备溶液</th> <th rowspan="2">溶剂体积 浓度</th> <th colspan="3">质量</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td></td> <td>1 mM</td> <td>3.5287 mL</td> <td>17.6435 mL</td> <td>35.2871 mL</td> </tr> <tr> <td></td> <td>5 mM</td> <td>0.7057 mL</td> <td>3.5287 mL</td> <td>7.0574 mL</td> </tr> <tr> <td></td> <td>10 mM</td> <td>0.3529 mL</td> <td>1.7644 mL</td> <td>3.5287 mL</td> </tr> </tbody> </table> <p>* 产品不同，其溶解度不同。建议根据产品选择合适的溶剂配制储备溶液；配成溶液后，建议分装保存，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，建议在 6 个月内使用，-20°C 储存时，建议在 1 个月内使用。</p> <p><b>体内研究:</b></p> <p>建议根据您的<a href="#">实验动物和给药方式</a>选择适当的溶解方案。以下溶解方案都建议先按照<b>体外研究</b>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</p> <p>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>	配制储备溶液	溶剂体积 浓度	质量			1 mg	5 mg	10 mg		1 mM	3.5287 mL	17.6435 mL	35.2871 mL		5 mM	0.7057 mL	3.5287 mL	7.0574 mL		10 mM	0.3529 mL	1.7644 mL	3.5287 mL
配制储备溶液	溶剂体积 浓度			质量																				
		1 mg	5 mg	10 mg																				
	1 mM	3.5287 mL	17.6435 mL	35.2871 mL																				
	5 mM	0.7057 mL	3.5287 mL	7.0574 mL																				
	10 mM	0.3529 mL	1.7644 mL	3.5287 mL																				

- 建议依照次序添加每种溶剂: 10% DMSO 40% PEG300 5% Tween-80 45% saline

Solubility:  $\geq 2.5 \text{ mg/mL}$  (8.82 mM); Clear solution

## 溶解度数据

此方案可获得  $\geq 2.5 \text{ mg/mL}$  (8.82 mM, 饱和度未知) 的澄清溶液。

以 1 mL 工作液为例, 取 100  $\mu\text{L}$  25.0 mg/mL 的澄清 DMSO 储备液加到 400  $\mu\text{L}$  PEG300 中, 混合均匀; 向上述体系中加入 50  $\mu\text{L}$  Tween-80, 混合均匀; 然后继续加入 450  $\mu\text{L}$  生理盐水定容至 1 mL。

将 0.9 g 氯化钠, 完全溶解于 100 mL ddH<sub>2</sub>O 中, 得到澄清透明的生理盐水溶液

- 建议依照次序添加每种溶剂: 10% DMSO 90% (20% SBE- $\beta$ -CD in saline)

Solubility:  $\geq 2.5 \text{ mg/mL}$  (8.82 mM); Clear solution

此方案可获得  $\geq 2.5 \text{ mg/mL}$  (8.82 mM, 饱和度未知) 的澄清溶液。

以 1 mL 工作液为例, 取 100  $\mu\text{L}$  25.0 mg/mL 的澄清 DMSO 储备液加到 900  $\mu\text{L}$  20% 的 SBE- $\beta$ -CD 生理盐水水溶液中, 混合均匀。

将 2 g 磺丁基醚  $\beta$ -环糊精加入 5 mL 生理盐水中, 再用生理盐水定容至 10 mL, 完全溶解, 澄清透明

- 建议依照次序添加每种溶剂: 10% DMSO 90% corn oil

Solubility:  $\geq 2.5 \text{ mg/mL}$  (8.82 mM); Clear solution

此方案可获得  $\geq 2.5 \text{ mg/mL}$  (8.82 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  $\mu\text{L}$  25.0 mg/mL 的澄清 DMSO 储备液加到 900  $\mu\text{L}$  玉米油中, 混合均匀。

- 建议依照次序添加每种溶剂: 5% DMSO 40% PEG300 5% Tween-80 50% saline

Solubility:  $\geq 2.5 \text{ mg/mL}$  (8.82 mM); Clear solution

- 建议依照次序添加每种溶剂: 5% DMSO 95% (20% SBE- $\beta$ -CD in saline)

Solubility: 2.5 mg/mL (8.82 mM); Suspended solution; Need ultrasonic

\*