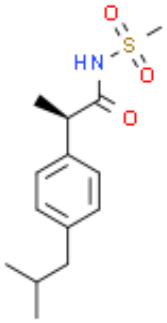
Product Data Sheet

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 :	S(C([H])([H])[H])(N([H])C([C@]([H])(C([H])([H])[H])C1C([H])=C([H])C(=C([H])C=1[H])C([H])([H])C([H])(C([H])([H])[H])C([H])([H])[H])=O)(=O)=O		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

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，IC50 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 **CXCR1** and **CXCR2** activation with **IC_{50}**s of 1 and 100 nM, respectively.
IC50 & Target[1][2]	CXCR1 5.6 nM (IC_{50}, in L1.2 cells) CXCR1 80 nM (IC_{50}, in L1.2 cells) CXCR1 1 nM (IC_{50}, in cells) CXCR2 ～100 nM (IC_{50}, in cells)

体外研究(In Vitro)	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 (IC_{50} 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. **Medlife has not independently confirmed the accuracy of these methods. They are for reference only.**
体内研究(In Vivo)	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-1β in the brain after middle cerebral artery occlusion/reperfusion (MCAo) in mice. Bars represent levels of IL-1β (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.). **Medlife has not independently confirmed the accuracy of these methods. They are for reference only.**

包装储存

Powder	**-20°C**	3 years
	4°C	2 years
In solvent	**-80°C**	6 months
	-20°C	1 month

体外研究:

DMSO : ≥ 100 mg/mL (352.87 mM)

H_2O : < 0.1 mg/mL (insoluble)

* "≥" means soluble, but saturation unknown.

	溶剂体积 / 质量 浓度	1 mg	5 mg	10 mg
配制储备溶液	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

* 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**。
  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。

体内研究:

建议根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都建议先按照 **体外研究** 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**

溶解度数据	1. 建议依照次序添加每种溶剂： 10% DMSO 40% PEG300 5% Tween-80 45% saline Solubility: ≥ 2.5 mg/mL (8.82 mM); Clear solution 此方案可获得 ≥ 2.5 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 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。 将 0.9 g 氯化钠，完全溶解于 100 mL ddH?O 中，得到澄清透明的生理盐水溶液 2. 建议依照次序添加每种溶剂： 10% DMSO 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (8.82 mM); Clear solution 此方案可获得 ≥ 2.5 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 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。 将 2 g 磺丁基醚 β-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 3. 建议依照次序添加每种溶剂： 10% DMSO 90% corn oil Solubility: ≥ 2.5 mg/mL (8.82 mM); Clear solution 此方案可获得 ≥ 2.5 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 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL玉米油中，混合均匀。 4. 建议依照次序添加每种溶剂： 5% DMSO 40% PEG300 5% Tween-80 50% saline Solubility: ≥ 2.5 mg/mL (8.82 mM); Clear solution 5. 建议依照次序添加每种溶剂： 5% DMSO 95% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (8.82 mM); Suspended solution; Need ultrasonic *