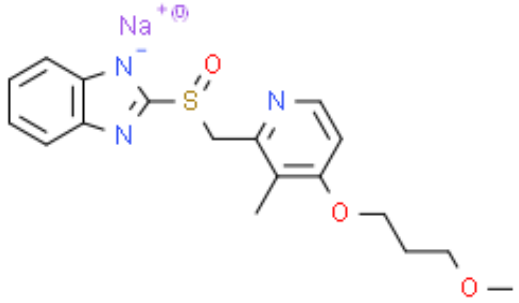
Product Data Sheet

Cas No.:	117976-90-6	Cat. No:	PC11957
Product Name:	Rabeprazole sodium		
Product synonym:	雷贝拉唑钠;2-{[4-(3-甲氧基丙氧基)-3-甲基吡啶-2-基]甲亚磺酰基}-1H-苯并咪唑钠;雷贝拉唑钠盐;Rabeprazole Sodium Salt 雷贝拉唑钠盐;雷贝拉唑-D4钠盐;雷贝拉唑钠 标准品;雷贝拉唑钠（质子泵抑制剂）;雷贝拉唑钠标准品(JP);雷奈酸锶;雷贝拉唑钠对照品;雷贝拉唑钠及中间体;厂家供应雷贝拉唑整套杂质		
Chemical name:	Rabeprazole sodium		
MF:	C18H20N3NAO3S	FW:	381.4245
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	S(C1=NC2=C([H])C([H])=C([H])C([H])=C2[N-]1)(C([H])([H])C1C(C([H])([H])[H])=C(C([H])=C([H])N=1)OC([H])([H])C([H])([H])C([H])([H])OC([H])([H])[H])=O.[Na+]		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

质子泵抑制剂,Rabeprazole (LY307640)钠盐是质子泵抑制剂，可抗溃疡。

生物活性	Rabeprazole sodium (LY307640 sodium) is a second-generation proton **pump inhibitor** (**PPI**) that irreversibly inactivates gastric H/K-ATPase. Rabeprazole sodium induces **apoptosis**. Rabeprazole sodium acts as an uridine nucleoside ribohydrolase (**UNH**) inhibitor with an **IC_{50}** of 0.3 μM. Rabeprazole sodium can be used for the research of gastric ulcerations and gastroesophageal reflux.
IC50 & Target[1][2]	Pump inhibitor (PPI) IC50: 0.3 μM (UNH) H/K-ATPase Apoptosis

体外研究(In Vitro)

Rabeprazole attenuates the cell viability of the human gastric cancer cells following treatment with 0.2 mM for 16 hours. Rabeprazole completely inhibits the phosphorylation of ERK1/2 in the MKN-28 cells. The gastric cancer cell line MKN-28 is cultured in acidic culture media (pH 5.4) for 2 hours. Pretreatment with Rabeprazole (0.2 mM for 2 hours) leads to strong inhibition of ERK 1/2 phosphorylation in the MKN-28 cells.

Medlife has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay

Cell Line:	Three gastric cancer cell lines KATO III, MKN-28 and MKN-45
Concentration:	0.2 mM
Incubation Time:	16 hours
Result:	Treatment resulted in the attenuation of viability in all cancer cell lines tested, the cell viability of the MKN-28

Western Blot Analysis

Cell Line:	Three gastric cancer cell lines (KATO III, MKN-28 and MKN-45)
Concentration:	0.2 mM
Incubation Time:	Pretreatment for 2 hours
Result:	Led to strong inhibition of ERK 1/2 phosphorylation in the MKN-28 cells, but a similar effect was not observed

体内研究(In Vivo)

Rabeprazole (10 mg/kg; P.O.; every 48 h for 18 weeks) course leads to a significant decline in bone mineral density (BMD) and decreases serum calcium level and produces secondary hyperparathyroidism in female mice.

Medlife has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Female Swiss albino mice (body weight equals 18-26 g)
Dosage:	10 mg/kg
Administration:	Oral administration; every 48 h for 18 weeks
Result:	Showed significantly lower serum calcium level compared to the vehicle treated group (5.5±2.07 vs. 9.68±2.77

包装储存

4°C, stored under nitrogen

*In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)

体外研究:

H_2O : ≥ 100 mg/mL (262.18 mM)

DMSO : ≥ 48 mg/mL (125.85 mM)

* "≥" means soluble, but saturation unknown.

配制储备溶液	溶剂体积 / 质量 浓度	1 mg	5 mg	10 mg
	1 mM	2.6218 mL	13.1089 mL	26.2178 mL
	5 mM	0.5244 mL	2.6218 mL	5.2436 mL
	10 mM	0.2622 mL	1.3109 mL	2.6218 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**。

溶解度数据	**储备液的保存方式和期限：** -80°C, 6 months; -20°C, 1 month (stored under nitrogen)。-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** 1. 建议依照次序添加每种溶剂： 10% DMSO 40% PEG300 5% Tween-80 45% saline Solubility: ≥ 2.08 mg/mL (5.45 mM); Clear solution 此方案可获得 ≥ 2.08 mg/mL (5.45 mM，饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 μL 20.8 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: ≥ 2.08 mg/mL (5.45 mM); Clear solution 此方案可获得 ≥ 2.08 mg/mL (5.45 mM，饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 μL 20.8 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: ≥ 2.08 mg/mL (5.45 mM); Clear solution 此方案可获得 ≥ 2.08 mg/mL (5.45 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 20.8 mg/mL 的澄清 DMSO 储备液加到 900 μL玉米油中，混合均匀。 *