上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话：021-61312973　　传真：021-55068248
网址：www.shyuanye.com
邮箱：shyysw@sina.com

产品名称：ATB-346
产品别名：ATB-346

生物活性：

Description

ATB-346 is a novel hydrogen sulphide-releasing derivative of naproxen with markedly reduced toxicity. IC50 value: Target: COX-2 ATB-346 suppressed gastric prostaglandin E(2) synthesis as effectively as naproxen, but produced negligible damage in the stomach and intestine, Unlike naproxen and celecoxib, ATB-346 accelerated healing of pre-existing gastric ulcers. In a mouse airpouch model, ATB-346 suppressed cyclooxygenase-2 activity and inhibited leukocyte infiltration more effectively than naproxen. ATB-346 was as effective as naproxen in adjuvant-induced arthritis in rats, with a more rapid onset of activity. Unlike naproxen, ATB-346 did not elevate blood pressure in hypertensive rats [1]. Treatement with ATB-346 exhibited a significantly more rapid and sustained recovery of motor function, achieving greater than double the increase in locomotion score of the naproxen group by the 10th day of treatment. ATB-346 also significantly reduced the severity of inflammation (proinflammatory cytokines, apoptosis of neural tissue, and nitrosative stress) that characterized the secondary effects of SCI [2].

Solvent&Solubility

In Vitro:

DMSO : ≥ 51.6 mg/mL (141.20 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.7364 mL	13.6818 mL	27.3635 mL
	5 mM	0.5473 mL	2.7364 mL	5.4727 mL
	10 mM	0.2736 mL	1.3682 mL	2.7364 mL

*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。

In Vivo:

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 In Vitro 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.请依序添加每种溶剂： 10% DMSO→40% PEG300 →5% Tween-80 → 45% saline

Solubility: ≥ 2.5 mg/mL (6.84 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (6.84 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。

[1]. De Cicco P, et al. ATB-346, a novel hydrogen sulfide-releasing anti-inflammatory drug, induces apoptosis of human melanoma cells and inhibits melanoma development in vivo. Pharmacol Res. 2016

References	Dec;114:67-73. [2]. Campolo M, et al. A hydrogen sulfide-releasing cyclooxygenase inhibitor markedly accelerates recovery from experimental spinal cord injury. FASEB J. 2013 Nov;27(11):4489-99.