产品名称：**Triflusal**
产品别名：三氟柳

生物活性：

Description

Triflusal irreversibly inhibits the production of thromboxane-B2 in platelets by acetylating cycloxygenase-1. Target: COX Triflusal at 10 mM, 100 mM and 1 M decreases LDH efflux in rat brain slices after anoxia/reoxygenation by 24%, 35% and 49% respectively. Triflusal also reduces inducible NO synthase activity by 18%, 21% and 30% [1]. Triflusal (10 mg/kg i.v.) reduces platelet deposition on subendothelium-induced primary thrombus by about 68% in rabbits. Triflusal (10 mg/kg i.v.) reduces platelet deposition on a fresh thrombus formed over tunica media by about 48% in rabbits. Triflusal (40 mg/kg p.o.) reduces platelet deposition on a primary thrombus triggered by subendothelium and tunica media by 53% in rabbits. Triflusal (40 mg/kg p.o.) significantly reduces Cox-2 mRNA levels and protein levels without influence Cox-1 mRNA levels on the vascular wall in rabbits [2]. Triflusal (600 mg/day for 5 days) results in an increase in NO production by neutrophils and an increase in endothelial nitric oxide synthase (eNOS) protein expression in neutrophils in healthy volunteers [3].

IC_{50} & Target

COX-2	COX-2
280 μM (IC_{50})	160 μM (IC_{50}, in human blood)

Solvent&Solubility

In Vitro:

DMSO： 100 mg/mL (402.97 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.0297 mL	20.1483 mL	40.2966 mL
	5 mM	0.8059 mL	4.0297 mL	8.0593 mL
	10 mM	0.4030 mL	2.0148 mL	4.0297 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: ≥ 3 mg/mL (12.09 mM); Clear solution

此方案可获得 ≥ 3 mg/mL (12.09 mM，饱和度未知) 的澄清溶液。

以 1 mL 工作液为例，取 100 μL 30.0 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。

2.请依序添加每种溶剂： 10% DMSO→ 90% (20% SBE-β-CD in saline)

Solubility: ≥ 3 mg/mL (12.09 mM); Clear solution

此方案可获得 ≥ 3 mg/mL (12.09 mM，饱和度未知) 的澄清溶液。

以 1 mL 工作液为例，取 100 μL 30.0 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。 3.请依序添加每种溶剂： 10% DMSO →90% corn oil Solubility: ≥ 3 mg/mL (12.09 mM); Clear solution 此方案可获得 ≥ 3 mg/mL (12.09 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 30.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中，混合均匀。
References	[1]. Fernández de Arriba A, et al. Inhibition of cyclooxygenase-2 expression by 4-trifluoromethyl derivatives of salicylate, triflusal, and its deacetylated metabolite, 2-hydroxy-4-trifluoromethylbenzoic acid. Mol Pharmacol. 1999 Apr;55(4):753-60. [2]. Duran, X., et al., Protective effects of triflusal on secondary thrombus growth and vascular cyclooxygenase-2. J Thromb Haemost, 2008. 6(8): p. 1385-92. [3]. De Miguel, L.S., et al., A 4-trifluoromethyl derivative of salicylate, triflusal, stimulates nitric oxide production by human neutrophils: role in platelet function. Eur J Clin Invest, 2000. 30(9): p. 811-7.