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产品名称：Adelmidrol
产品别名：阿地米屈

生物活性：

Description	Adelmidrol exerts important anti-inflammatory effects that are partly dependent on PPARγ. Adelmidrol reduces NF-κB translocation, and COX-2 expression.		
IC_{50} & Target	NF-κB	COX-2	PPARγ
In Vitro	Adelmidrol is a palmitoylethanolamide analogue. Adelmidrol reduces NF-κB translocation, COX-2, and p-ERK expression; proinflammatory cytokine release; and the incidence of nitrotyrosine and poly(ADP)ribose in the colon[1].		
In Vivo	Adelmidrol (10 mg/kg, o.s.) reduces significantly the degree and severity of the macroscopic and histologic signs of colon injury. Moreover, 4 days after colitis induced by dinitrobenzene sulfonic acid (DNBS) treatment, all mice have diarrhea and a reduction in body weight (compared with the sham groups). Adelmidrol (10 mg/kg, o.s.) treatment significantly reduces the loss of body weight. The inflammatory bowel disease (IBD) induced by DNBS intrarectally administered is also characterized by an augmentation in myeloperoxidase (MPO) activity, an indicator of neutrophil accumulating in the colon. This is consistent with light microscopic observations showing the colon of vehicle-treated DNBS mice to contain a large number of neutrophils. In contrast, Adelmidrol (10 mg/kg, o.s.) significantly reduces the degree of polymorphonuclear cell infiltration (determined as reduction in MPO activity) in inflamed colon[1].		

Solvent&Solubility

In Vitro:

DMSO： ≥ 34 mg/mL (123.92 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.6448 mL	18.2242 mL	36.4485 mL
	5 mM	0.7290 mL	3.6448 mL	7.2897 mL
	10 mM	0.3645 mL	1.8224 mL	3.6448 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。

References

[1]. Cordaro M, et al. Adelmidrol, a Palmitoylethanolamide Analogue, as a New Pharmacological Treatment for the Management of Inflammatory Bowel Disease. Mol Pharmacol. 2016 Nov;90(5):549-561.

实验参考：

Animal Administration	Mice[1] Male adult CD1 mice (25-30 g) and male mice (20-27 g) are placed in a controlled environment and maintained on a 12-hour light/dark cycle with food and water available ad libitum. Mice are casually divided into the following groups (10 in each group) (1)Sham+vehicle group: Vehicle solution (saline) is given by oral administration for 4 days. (2) Sham+Adelmidrol (10 mg/kg): Administered o.s. for 4 days. (3) DNBS+vehicle: Mice are injected by DNBS as described, and vehicle (saline) is

	given o.s. each day for 4 days, starting 60 minutes after the injection of DNBS. (4) DNBS+Adelmidrol (10 mg/kg): Mice are injected by DNBS as described, and Adelmidrol (10 mg/kg) is given o.s. each day, starting 60 minutes after administration of DNBS[1].
References	[1]. Cordaro M, et al. Adelmidrol, a Palmitoylethanolamide Analogue, as a New Pharmacological Treatment for the Management of Inflammatory Bowel Disease. Mol Pharmacol. 2016 Nov;90(5):549-561.