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产品名称：
Cyclo(.alpha.R)-.alpha.-hydroxy-4-(4-morpholinyl)benzenepropanoyl-N-methyl-L-leucyl-(2R)-2-hydroxypropanoyl-N-methyl-L-leucyl-(.

产品别名：Emodepside；Bay 44-4400

生物活性：

Description	Emodepside (PF 1022-221) is a cyclooctadepsipeptide with broad-spectrum anthelmintic activity.
In Vitro	Emodepside is a semisynthetic derivative of PF1022A, which contains a morpholine attached in para position at each of both D-phenyllactic acids. Emodepside is efficacious against a variety of gastrointestinal nematodes. Emodepside binds to a presynaptic latrophilin receptor in nematodes[1]. Emodepside produces a slow time-dependent (20 min), 4-aminopyridine sensitive, concentration-dependent hyperpolarization and increase in voltage-activated K currents. Emodepside has an inhibitory effect on spiking. Emodepside significantly inhibits the ryanodine increase in spike frequency between the 20 and 35 min period by 9.8 spikes/min[2]. In the presence of emodepside, highly increased currents are observed without depolarization up to a threshold of 0 mV and without any additional stimuli to artificially increase [Ca^{2+}]i levels. These novel findings confirm that Slo-1 is a direct target of emodepside[3].
In Vivo	Emodepside interferes with signaling at the neuromuscular junction on the body-wall muscles, pharynx and egg-laying muscles and thus inhibits three important physiological functions: locomotion, feeding and reproduction[4].

Solvent&Solubility

In Vitro:

DMSO： ≥ 31 mg/mL (27.69 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	0.8933 mL	4.4667 mL	8.9334 mL
	5 mM	0.1787 mL	0.8933 mL	1.7867 mL
	10 mM	0.0893 mL	0.4467 mL	0.8933 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]. Harder A, et al. Mechanisms of action of emodepside. Parasitol Res. 2005 Oct;97 Suppl 1:S1-10.

[2]. Buxton SK, et al. On the mode of action of emodepside: slow effects on membrane potential and voltage-activated currents in Ascaris suum. Br J Pharmacol. 2011 Sep;164(2b):453-70.

[3]. Kulke D, et al. Characterization of the Ca2+-gated and voltage-dependent K+-channel Slo-1 of nematodes and its interaction with emodepside. PLoS Negl Trop Dis. 2014 Dec 18;8(12):e3401.

[4]. Bull K, et al. Effects of the novel anthelmintic emodepside on the locomotion, egg-laying behaviour and development of Caenorhabditis elegans. Int J Parasitol. 2007 May;37(6):627-36.