

PRODUCT INFORMATION



Emodepside

Item No. 41247

CAS Registry No.: 155030-63-0

Formal Name: cyclo[(αR)-α-hydroxy-4-(4-morpholinyl)benzenepropanoyl-N-methyl-L-leucyl-(2R)-2-hydroxypropanoyl-N-methyl-L-leucyl-(αR)-α-hydroxy-4-(4-morpholinyl)benzenepropanoyl-N-methyl-L-leucyl-(2R)-2-hydroxypropanoyl-N-methyl-L-leucyl]

Synonyms: BAY-44-4400, PF-1022-221

MF: C₆₀H₉₀N₆O₁₄

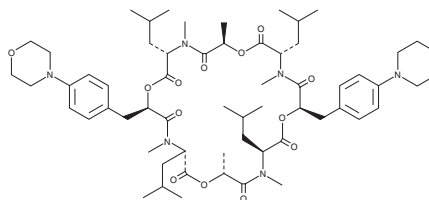
FW: 1,119.4

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Emodepside is supplied as a solid. A stock solution may be made by dissolving the emodepside in the solvent of choice, which should be purged with an inert gas. Emodepside is slightly soluble (0.1-1 mg/ml) in DMSO.

Description

Emodepside is a macrocyclic depsipeptide anthelmintic and semisynthetic derivative of the fungal metabolite and anthelmintic PF-1022A (Item No. 29700).^{1,2} It inhibits locomotion in *C. elegans* (IC₅₀ = 14 nM), an effect that can be reversed by knockout of the gene encoding the calcium-activated potassium channel SLO-1.² Emodepside (10 mg/kg) decreases the survival of *N. brasiliensis* and *S. ratti* worms in infected rats and *H. polygyrus* worms in infected mice.¹ Formulations containing emodepside in combination with praziquantel have been used as anthelmintics in cats and dogs.

References

1. Harder, A. and von Samson-Himmelstjerna, G. Activity of the cyclic depsipeptide emodepside (BAY 44-4400) against larval and adult stages of nematodes in rodents and the influence on worm survival. *Parasitol. Res.* **87**(11), 924-928 (2001).
2. Guest, M., Bull, K., Walker, R.J., et al. The calcium-activated potassium channel, SLO-1, is required for the action of the novel cyclo-octadepsipeptide anthelmintic, emodepside, in *Caenorhabditis elegans*. *Int. J. Parasitol.* **37**(14), 1577-1588 (2007).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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