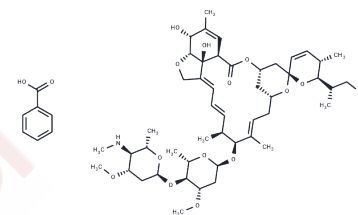


Emamectin Benzoate

Chemical Properties

CAS No. :	155569-91-8
Formula:	C ₅₆ H ₈₁ NO ₁₅
Molecular Weight:	1008.256
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Emamectin Benzoate (MK-244), by binding gamma-aminobutyric acid (GABA) receptor and glutamate-gated chloride channels disrupting nerve signals within arthropods, acts as a chloride channel activator.
Targets(IC50)	Apoptosis, Reactive Oxygen Species, GABA Receptor, Parasite, ROS
In vitro	Emamectin Benzoate stimulates the release of GABA from the synapses between nerve cells. It also additionally increasing GABA's affinity for its receptor on the post-junction membrane of muscle cells in insects and arthropods.

Solubility Information

Solubility	DMSO: 100 mg/mL (99.18 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (3.97 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.9918 mL	4.959 mL	9.9181 mL
5 mM	0.1984 mL	0.9918 mL	1.9836 mL
10 mM	0.0992 mL	0.4959 mL	0.9918 mL
50 mM	0.0198 mL	0.0992 mL	0.1984 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Cheng X, et al. Effect of Emamectin Benzoate on Root-Knot Nematodes and Tomato Yield. PLoS One. 2015 Oct 28; 10(10):e0141235.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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