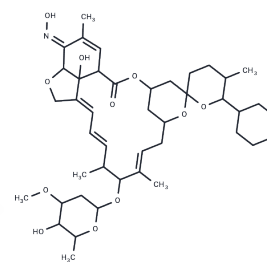


Selamectin

Chemical Properties

CAS No. :	220119-17-5
Formula:	C43H63NO11
Molecular Weight:	769.96
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	Selamectin (UK-124114) is a macrocyclic lactone derivative of ivermectin, an anthelmintic that potentiates glutamate- and GABA-gated chloride channel opening in nematodes. In an <i>H. contortus</i> larval development assay, selamectin (0.1 µg/ml) shows the effect of growth inhibition.
Targets(IC50)	Antibacterial,Parasite,Chloride channel,P-gp

Solubility Information

Solubility	DMSO: 242.5 mg/mL (314.95 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: 3.3 mg/mL (4.29 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	1.2988 mL	6.4938 mL	12.9877 mL
5 mM	0.2598 mL	1.2988 mL	2.5975 mL
10 mM	0.1299 mL	0.6494 mL	1.2988 mL
50 mM	0.026 mL	0.1299 mL	0.2598 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

Holden-Dye, L. , et al. Anthelmintic drugs and nematicides: Studies in Caenorhabditis elegans. WormBook 16, (2014).

Su C, Cheng C, Rong Z, et al. Repurposing fluphenazine as an autophagy modulator for treating liver cancer. Heliyon.2023

Michael, B.,et al. Comparison of ivermectin, doramectin, selamectin, and eleven intermediates in a nematode larval development assay. Journal of Parasitology 87(3), 692-696 (2001).

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