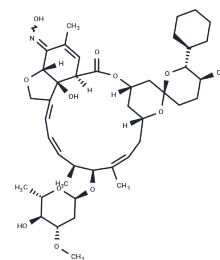


UK-124114

## Chemical Properties

CAS No. : 165108-07-6  
 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   | UK-124114 (Selamectin) 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) | Others,GABA Receptor   |
| In vivo       | A single administration of 6 mg/kg topical selamectin given every two months could effectively prevent <i>B. malayi</i> infection.?Application of topical selamectin twice a year could block circulating microfilariae.?Since there are no treatment guidelines currently available for lymphatic filarial infection in cats, the data obtained from this study could be used to guide the management of brugian lymphatic filarial infection in reservoir cats[3]. |

## Solubility Information

|            |   |
|------------|---|
| Solubility | DMSO: 50 mg/mL (64.94 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

### 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).

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