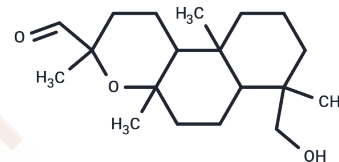


Juvabione

Chemical Properties

CAS No. :	17904-23-3
Formula:	C ₁₉ H ₃₂ O ₃
Molecular Weight:	308.462
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	Juvabione is the methyl ester of todomatuic acid, both of which are sesquiterpenes (C ₁₅) found in the wood of true firs of the genus <i>Abies</i> . They exist as part of a mixture of sesquiterpenes based on the bisabolane scaffold. Sesquiterpenes of this family, known as insect juvenile hormone analogues (IJHA) can mimic juvenile activity in order to inhibit insect reproduction and growth. These compounds can form the second line of defense against insect induced trauma and fungal pathogens.
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2419 mL	16.2096 mL	32.4191 mL
5 mM	0.6484 mL	3.2419 mL	6.4838 mL
10 mM	0.3242 mL	1.621 mL	3.2419 mL
50 mM	0.0648 mL	0.3242 mL	0.6484 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

- Awasthi P, Sharma P. In silico screening of the juvabione category of juvenile hormone analogues with juvenile hormone binding protein of *Galleria mellonella*--a docking study. *SAR QSAR Environ Res*. 2012 Oct;23(7-8):607-25. doi: 10.1080/1062936X.2012.665384. Epub 2012 Jul 17. PubMed PMID: 22799597.
- Jedlicka P, Hrdý I, Kuldová J, Wimmer Z. The systemic effects of juvenoids on the red firebug *Pyrrhocoris apterus* and on the pea aphid *Acyrtosiphon pisum* with data on life table response. *Pest Manag Sci*. 2007 Oct;63(10):1026-35. PubMed PMID: 17724791.
- Itagaki N, Iwabuchi Y. Enantio- and diastereo-controlled synthesis of (+)-juvabione employing organocatalytic desymmetrization and photoinduced fragmentation. *Chem Commun (Camb)*. 2007 Mar 12;(11):1175-6. Epub 2007 Jan 9. PubMed PMID: 17347730.
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