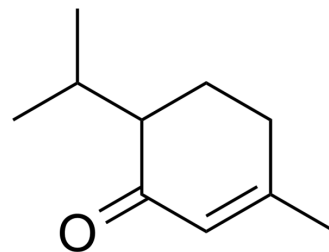


Piperitone

Cat. No.:	HY-N9496
CAS No.:	89-81-6
Molecular Formula:	C ₁₀ H ₁₆ O
Molecular Weight:	152.23
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Piperitone is as a powerful repellent and antiappetent agent. Piperitone is very toxic to <i>Cymbopogon schoenanthus</i> (<i>C. schoenanthus</i>) adults, newly laid eggs and to neonate larvae. Insecticidal activity ^[1] .								
In Vitro	Piperitone isolated from <i>Cymbopogon schoenanthus</i> (<i>C. schoenanthus</i>) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
In Vivo	<p>The insecticidal activity of crude essential oil extracted from <i>Cymbopogon schoenanthus</i> and of its main constituent, Piperitone, is assessed on different developmental stages of <i>Callosobruchus maculatus</i> (<i>C. maculatus</i>). Piperitone is toxic to <i>C. maculatus</i> adults with a LC₅₀ value of 1.6 µL/L. Piperitone inhibits the development of newly laid eggs and of neonate larvae, but is less toxic than the crude extract to individuals developing inside the seeds. Piperitone shows the strongest ovicidal activity. All the eggs were aborted at 6.7 µL/L. Piperitone (10 µM) kills all the neonate larvae^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Fifty pairs of <i>C. maculatus</i> adults^[1]</td> </tr> <tr> <td>Dosage:</td> <td>6.7, 10, 16.7 or 33.3 µL/L</td> </tr> <tr> <td>Administration:</td> <td>24 hours</td> </tr> <tr> <td>Result:</td> <td>Piperiton was more toxic than crude oil because the LC₅₀ recorded was 1.6 µL/L for Piperitone vs. 2.7 µL/L for the crude oil.</td> </tr> </table>	Animal Model:	Fifty pairs of <i>C. maculatus</i> adults ^[1]	Dosage:	6.7, 10, 16.7 or 33.3 µL/L	Administration:	24 hours	Result:	Piperiton was more toxic than crude oil because the LC ₅₀ recorded was 1.6 µL/L for Piperitone vs. 2.7 µL/L for the crude oil.
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REFERENCES

[1]. Guillaume K Ketoh, et al. Comparative effects of *Cymbopogon schoenanthus* essential oil and piperitone on *Callosobruchus maculatus* development. *Fitoterapia*. 2006 Dec;77(7-8):506-10.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA