

Bisepoxy Juvenile Hormone III (mixture of diastereomers)

Catalog number: S-0157

Molecular Formula: C₁₆H₂₅O₄

MW: 281.37

CAS: 1315330-19-8

Alternate Name: trans-7,8,10,11-Bisepoxyfarnesenic acid methyl ester, JHB3

Solubility: Soluble in most organic solvents, poorly soluble in water.

Storage and Handling: Store dry at -20 °C. Stock solutions should be stored frozen (-20 °C or below).

Background: Juvenile Hormones are sesquiterpanoids found in insects that regulates important physiological processes such as reproduction and metamorphosis. Bisepoxy juvenile hormone III (JHB3) is biosynthesized via the mevalonate pathway in the ring-glands of higher dipterans (flies).

References: 1) J.A. Tillman, S.J. Seybold, R.A Jurenka, R.A., et al. "Insect pheromones - an overview of biosynthesis and endocrine regulation." Insect Biochemistry and Molecular Biology, 1999, 29(6), 481-514.

- 2) D.S. Richard, S.W. Applebaum, et al "Juvenile hormone bisepoxide biosynthesis in vitro by the ring gland of Drosophila melanogaster: a putative juvenile hormone in the higher Diptera" Proc. Nat. Sci Acad., 1989, 86 (4), 1421-1425.
- 3) K.S. Lefevere, K.S. Lacey, et al. "Identification and quantification of juvenile hormone biosynthesized by larval and adult Australian sheep blowfly Lucilia cuprina (Diptera: Calliphoridae)." Insect Biochem Mol. Bio., 1993, 23(6), 713-20.

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

Technical Data Sheet, Rev 2, 5/13/24- For research use only. Not intended for diagnostic or therapeutic use.



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