

4304 (C15 acetogenin)

Name: Dactylyne

{3-Bromo-2-(3-bromo-pent-2-enyl)-5-chloro-6-pent-2-en-4-ynyl-tetrahydro-pyran}

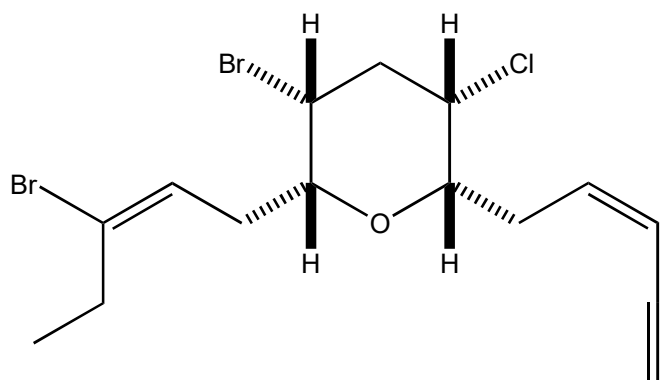
Origin: *Laurencia* sp. (Bisezaki, Motobu, Okinawa Prefecture, Japan)⁽¹⁾;
Laurencia lageniformis (Pulau Tikus, Sandakan, Sarawak, Malaysia)⁽¹⁾;
Aplysia dactylomela (Bimini, Bahamas)^(3,4);

Formula: C₁₅H₁₉Br₂ClO

Mol. Wt.: 410.57

Opt. Rot.: [α]_D²⁵ -38.2 (CHCl₃)⁽¹⁾; [α]_D²⁵ -36 (CHCl₃)⁽³⁾; [α]_D²³ -36.2 (CHCl₃)⁽⁴⁾

Mp.: 62-63⁽¹⁾; 62.2-63.3⁽³⁾; 62.5-63.5⁽⁴⁾



References and Notes

- (1) Suzuki, M., Nakano, S., Takahashi, Y., Abe, T., and Masuda, M. 1999. *Phytochemistry*, **51**, 657-662. Bisezakyne-A and -B, halogenated C₁₅ acetogenins from a Japanese *Laurencia* species. (¹³C-NMR)
 - (2) Masuda, M., Abe, T., Kogame, K., Kawaguchi, S., Phang, S. M., Daitoh, M., Sakai, T., Takahashi, Y., and Suzuki, M. 2002. *Botanica Marina*, **45**, 571-579. Taxonomic notes on marine algae from Malaysia. VIII. Three species of *Laurencia* (Rhodomelaceae). (together with 12-*epi*-obtusenyne, [dactylyne](#))
 - (3) McDonald, F. J., Campbell, D. C., Vanderah, D. J., Schmitz, F. J., Washecheck, D. M., Burks, J. E., and van der Helm, D. 1975. *J. Org. Chem.*, **40**, 665-666. Marine natural products. Dactylyne, an acetylenic dibromochloro ether from the sea hare *Aplysia dactylomela*.
- (X-ray crystallographic analysis) (UV, IR, ¹H-NMR)
- (4) Vanderah, D. J. and Schmitz, F. J. 1976. *J. Org. Chem.*, **41**, 3480-3781. Marine natural products: Isodactylyne, a halogenated acetylenic ether from the sea hare *Aplysia dactylomela*.