

4466 (C15 acetogenin)

Name: (3*E*)-Laureatin

{6-Bromo-4-(1-bromo-propyl)-2-pent-2-en-4-ynyl-3,8-dioxa-bicyclo[5.1.1]nonane}

Origin: *Laurencia nipponica* (Shichigahama, near Shiogama, Miyagi, Japan)⁽¹⁾;

Laurencia nipponica (Naoetsu and Kashiwazaki, Niigata, Japan)⁽²⁾;

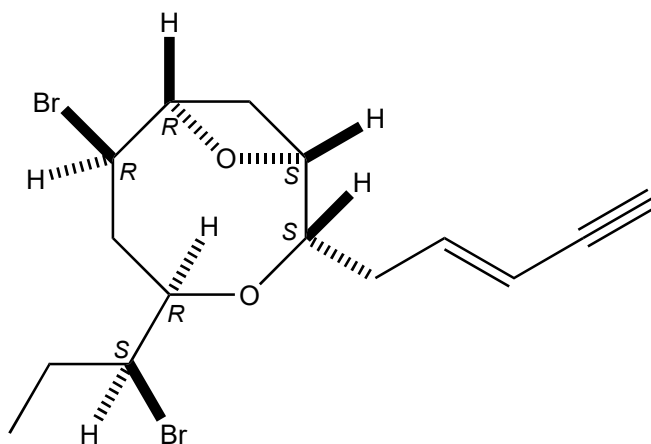
Laurencia nipponica (Shikanoshima Island, Hakata Bay, Fukuoka, Japan)⁽³⁾;

Formula: C₁₅H₂₀Br₂O₂

Mol. Wt.: 392.13

Opt. Rot.: [α]_D¹⁸ +36.6 (CHCl₃)

Mp.: 77-78



References and Notes

(1) Suzuki, M. and Kurosawa, E. 1987. Bull Chem. Soc. Jpn., **60**, 3791-3792. (3*E*)-Laureatin and (3*E*)-isolaureatin, halogenated C-15 non-terpenoid compounds from the red alga *Laurencia nipponica* Yamada. (UV, IR, ¹H-NMR, ¹³C-NMR, MS)

(2) Suzuki, M., Mizuno, Y., Matsuo, Y., and Masuda, M. 1996. Phytochemistry, **43**, 121-124. Neoisoprelaurefucin, a halogenated C₁₅ non-terpenoid compound from *Laurencia nipponica*. (together with neoisoprelaurefucin, (3*E*)-laureatin)

(3) Abe, T., Masuda, M., Kawaguchi, S., Itoh, T., and Suzuki, M. 1997. Phycol. Res., **45**, 173-176. Additional analysis of chemical diversity in *Laurencia nipponica* (Ceramiales, Rhodophyta). (together with (3*E*)-laureatin, (3*E*)-isolaureatin, 2,10-dibromo-3-chloro-9-hydroxy-α-chamigrene, 2,10-dibromo-3-chloro-α-chamigrene, laurene)

(4) **Transformation**; Ishihara, J., Kanoh, N., Fukuzawa, A., and Murai, A. 1994. Chem. Lett., **23**, 1563-1564. Isomerization of the (*Z*)-enyne unit to the (*E*)-enyne unit. Conversion of laureatin to (*E*)-isolaureatin.