

4710 (C15 acetogenin)

Name: Okamurallene {6-Bromo-2-(3-bromo-propa-1,2-dienyl)-5-[2-(3-methyl-oxiranyl)-cyclopropyl]-2,3,3a,6a-tetrahydro-furo[3,2-b]furan}

Origin: *Laurencia intricata* (as *L. okamurai*) (Bikuni, Hokkaido, Japan)⁽¹⁻⁴⁾;

Laurencia intricata (Hato-misaki, Chinzei, Saga, Prefecture Japan)⁽⁵⁾;

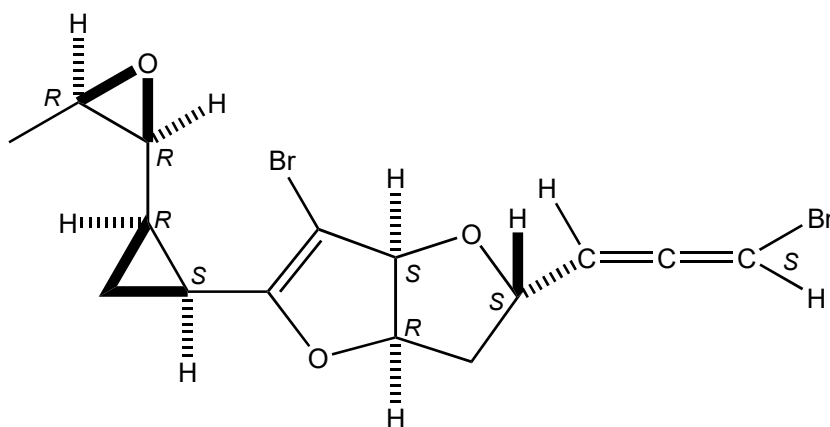
Laurencia intricata (Tokitsu, Oomura Bay, Nagasaki Prefecture, Japan)⁽⁵⁾;

Formula: C₁₅H₁₆Br₂O₃

Mol. Wt.: 404.09

Opt. Rot.: [α]_D²⁶ +160 (CHCl₃)

Mp.: Oil



References and Notes

- (1) Suzuki, M. and Kurosawa, E. 1981. Tetrahedron Lett., **22**, 3853-3856. Okamurallene, a novel halogenated C₁₅ metabolite from *Laurencia okamurai* Yamada. (IR, ¹H-NMR, ¹³C-NMR)
- (2) Suzuki, M. and Kurosawa, E. 1982. Chem. Lett., **11**, 289-292. Deoxyokamurallene and isookamurallene, new halogenated nonterpenoid C₁₅-compounds from the red alga *Laurencia okamurai* Yamada. (¹H-NMR, ¹³C-NMR)
- (3) **Structure revision**; Suzuki, M., Sasage, Y., Ikura, M., Hikichi, K., and Kurosawa, E. 1989. Phytochemistry, **28**, 2145-2148. Structure revision of okamurallene and structure elucidation of further C₁₅ non-terpenoid bromoallenes from *Laurencia intricata*. (¹H-NMR, ¹³C-NMR)
- (4) **Absolute configuration**; Suzuki, M., Kondo, H., and Tanaka, I. 1991. Chem. Lett., **20**, 33-34. The absolute stereochemistry of okamurallene and its congeners, halogenated C₁₅ nonterpenoids from the red alga *Laurencia intricata*. (X-ray crystallographic analysis)
- (5) Masuda, M., Kawaguchi, S., Abe, T., Kawamoto, T., and Suzuki, M. 2002. Phycol. Res., **50**, 135-144. Additional analysis of chemical diversity of the red algal genus *Laurencia* (Rhodomelaceae) from Japan.