

4729 (C15 acetogenin)

Name: Microcladallene C

{3-Bromo-6-(3-bromo-propa-1,2-dienyl)-8,9-dichloro-2-ethyl-decahydro-1,5-dioxabenzocyclooctene}

Origin: *Laurencia microcladia* (Cap Ferrat, Mediterranean Sea, France)⁽¹⁾;

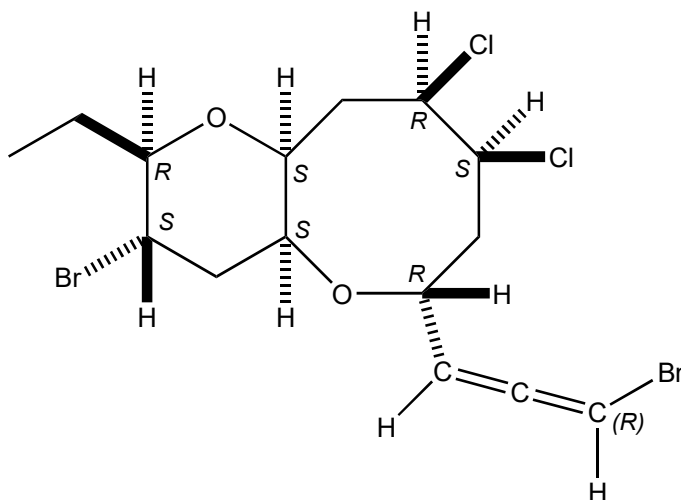
Laurencia majuscula (Nyudogatane, Okinoshima Island, Kochi Prefecture, Japan)⁽²⁾;

Formula: C₁₅H₂₀Br₂Cl₂O₂

Mol. Wt.: 463.03

Opt. Rot.: [α]_D²⁰ +116.7 (Me₂CO)⁽¹⁾; [α]_D²¹ +155 (Me₂CO)⁽²⁾; [α]_D²¹ +122 (CHCl₃)⁽²⁾

Mp.: Oil



References and Notes

(1) Kennedy, D. J., Selby, I. A., Cowe, H. J., Cox, P. J., and Thomson, R. H. 1984. J. Chem. Soc., Chem. Commun., **1984**, 153-155. Bromoallenes from the alga *Laurencia microcladia*. (¹H-NMR, ¹³C-NMR) (together with microcladallenes A, B, and C)

(2) Suzuki, M., Kurosawa, E., and Kurata, K. 1987. Bull. Chem. Soc. Jpn., **60**, 3795-3796. Majusculone, a novel norchamigrane-type metabolite from the red alga *Laurencia majusculae* Harvey. (together with majusculone, (Z)-(9R,10S)-10,15-dibromo-9-hydroxy-chamigra-1,3(15),7(14)-triene, (Z)-15-bromo-chamigra-1,3(15),7-trien-9-one, (E)-15-bromo-chamigra-1,3(15),7-trien-9-one, [microcladallene C](#))

(3) **Total synthesis**; Sohn, T., Kim, D., and Paton, R. S. 2015. Chem. Eur. J., **21**, 15988-15997. Substrate-controlled asymmetric total syntheses of microcladallenes A, B, and C based on the proposed structures.