

4733 (C15 acetogenin)

Name: Marilzabicycloallene D

{11-Bromo-5-(3-bromo-propa-1,2-dienyl)-2,8,10-trichloro-3-methyl-4,13-dioxa-bicyclo[5.5.1]tridecane}

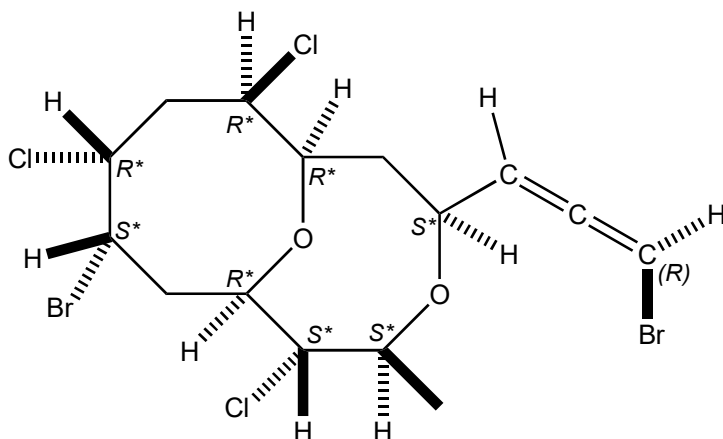
Origin: *Laurencia marilzae* (Paraiso Floral, Tenerife, Canary Islands, Spain)^(1,2);

Formula: C₁₅H₁₉Br₂Cl₃O₂

Mol. Wt.: 497.48

Opt. Rot.: [α]_D²⁵ -28.0 (CHCl₃)⁽²⁾

Mp.: Amorphous



References and Notes

- (1) Gutierrez-Cepeda, A., Fernandez, J. J., Norte, M., and Souto, M. L. 2013. *Org. Lett.*, **13**, 2690-2693. New bicyclotridecane C₁₅ nonterpenoid bromoallenes from *Laurencia marilzae*. (together with marilzabicycloallenes A-D) (¹H-NMR, ¹³C-NMR)
- (2) Supporting Information ([α]_D, UV, IR, CD)
- (3) **Total synthesis**; Clarke, J., Bonney, K. J., Yaqoob, M., Solanki, S., Rzepa, H. S., White, A. J. P., Millan, D. S., and Braddock, D. C. 2016. *J. Org. Chem.*, **81**, 9539-9552. Epimeric face-selective oxidations and diastereodivergent transannular oxonium ion formation fragmentations: Computational modeling and total syntheses of 12-epoxyobtusallene IV, 12-epoxyobtusallene II, obtusallene X, marilzabicycloallene C, and marilzabicycloallene D.