4811 (C15 acetogenin)

Name: 12-Epoxyobtusallene IV {2-Bromo-9-(3-bromo-propa-1,2-dienyl)-12-chloro-7-methyl-5,8,14-trioxa-tricyclo[9.2.1.$0^{4,6}$]tetradecane}

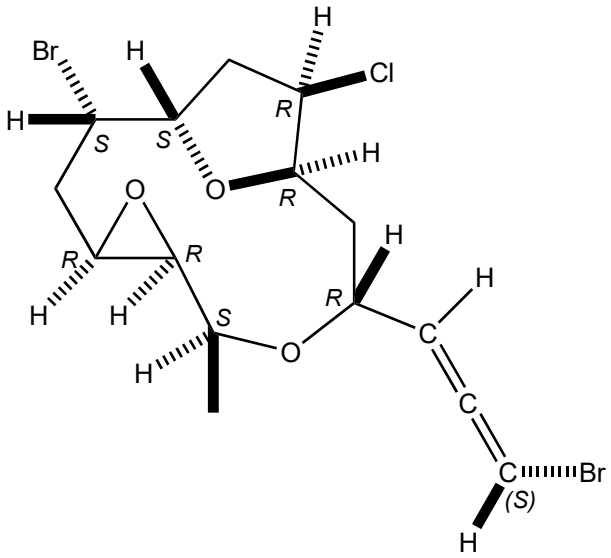
Origin: *Laurencia marilzae* (Paraiso Floral, Canary Islands, Spain)(1);

Formula: $C_{15}H_{19}Br_2ClO_3$

Mol. Wt.: 442.57

Opt. Rot.: $[\alpha]_D^{25}$ +53 ($CHCl_3$)

Mp.: 143-145



References and Notes

(1) Gutierrez-Cepeda, A., Fernandez, J. J., Gil, L. V., Lopez-Rodriguez, M., Norte, M., and Souto, M. L. 2011. J. Nat. Prod., **74**, 441-448. Nonterpenoid C_{15} acetogenins from *Laurencia marilzae*. (**X-ray crystallographic analysis**) (**UV, IR, ^{1}H-NMR, ^{13}C-NMR**) (together with 12-epoxyobtusallene IV, obtusallene X, marilzallene, (+)-4-acetoxymarirzallene, (-)-4-acetoxymarirzallene, *Z*-adrienyne, *E*-adrienyne, a epoxydodecane deriv., obtusalleen IV)

(2) **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.