

4107 (C15 acetogenin)

Name: *trans*-Laurediol

{Pentadeca-3,9,12-trien-1-yne-6,7-diol}

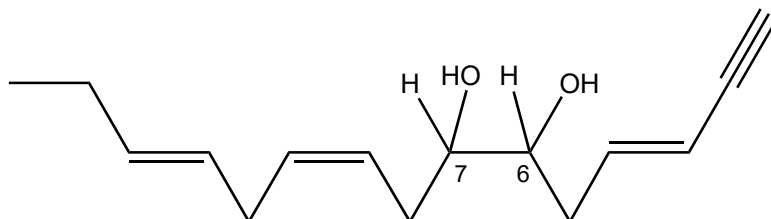
Origin: *Laurencia nipponica* (Hokkaido, Japan)⁽¹⁾;

Formula: C₁₅H₂₂O₂

Mol. Wt.: 234.33

Opt. Rot.: [α]_D +19.6 (CCl₄) (laurediol mixture)

Mp.: Oil



4:1 mixture of (6R,7R)- and (6S,7S)-threo isomers

References and Notes

- (1) Kurosawa, E., Fukuzawa, A., and Irie, T. 1972. *Tetrahedron Lett.*, **13**, 2121-2124. *trans*- and *cis*-Laurediol, unsaturated glycols from *Laurencia nipponica* Yamada. (UV, IR, ¹H-NMR, MS)
- (2) **Synthesis**; (a) Fukuzawa, A., Sato, H., Miyamoto, M., and Masamune, T. 1986. *Tetrahedron Lett.*, **27**, 2901-2902. Synthesis of *trans*-laurediol and its [9,12-²H₂]-analogue.; (b) Anorbe, B., Martin, V. S., Palazon, J. M., and Trujillo, J. M. 1986. *Tetrahedron Lett.*, **27**, 2901-2902. Enantiomeric syntheses of 6(R),7(R) and 6(S),7(S) *trans*- and *cis*-laurediol.; (c) Martin, T. and Martin, V. S. 2000. *Tetrahedron Lett.*, **41**, 2503-2505. A short synthesis of *trans*-(+)-laurediol.; (d) Gadikota, R. R., Keller, A. I., Callam, C. S., and Lowary, T. L. 2003. *Tetrahedron Asym.*, **14**, 737-742. Efficient syntheses of *trans*-(+)-laurediol from carbohydrate precursors.