

## 5201 (Indole)

Name: Itomaindole A; 4,6-Dibromo-2-methylsulfinyl-3-(methylthio)indole

{4,6-Dibromo-2-methanesulfinyl-3-methylsulfanyl-1*H*-indole}

Origin: *Laurencia brongniartii* (Komesu, Itoman, Okinawa Prefecture, Japan)<sup>(1,2)</sup>;

*Laurencia brongniartii* (Kikai Island, Kagoshima Prefecture, Japan)<sup>(3)</sup>;

*Laurencia brongniartii* (Ken-Ting National Park, south tip of Taiwan, China)<sup>(4)</sup>;

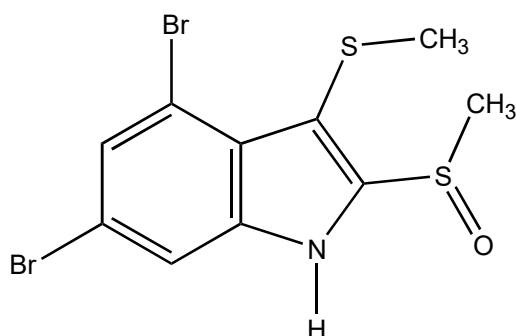
*Laurencia brongniartii* (the coast of Kenting, south tip of Taiwan, China)<sup>(5)</sup>;

Formula: C<sub>10</sub>H<sub>9</sub>Br<sub>2</sub>NOS<sub>2</sub>

Mol. Wt.: 383.12

Opt. Rot.: [α]<sub>D</sub><sup>25</sup> +8.0 (CHCl<sub>3</sub>)

Mp.: 134-136



### References and Notes

- (1) Tanaka, J., Higa, T., Bernardinelli, G., and Jefford, C. W. 1988. *Tetrahedron*, **29**, 6091-6094. Itomaindoles A and B, methylsulfinylindoles from *Laurencia brongniartii*. (**X-ray crystallographic analysis**) (UV, IR, <sup>1</sup>H-NMR, <sup>13</sup>C-NMR, MS) (together with [itomaindole A](#), itomaindole B, known 4,6-dibromo-2,3-(dimethylthio)indole)
- (2) Tanaka, J., Higa, T., Bernardinelli, G., and Jefford, C. W. 1989. *Tetrahedron*, **45**, 7301-7310. Sulfur-containing polybromoindoles from the red alga *Laurencia brongniartii*. (**X-ray crystallographic analysis**) (UV, IR, <sup>1</sup>H-NMR, <sup>13</sup>C-NMR, MS) (together with 2,4,6-tribromoindole, 2,3,4,6-tetrabromoindole, 4 sulfur-containing bromoindoles)
- (3) Kubota, N. K., Iwamoto, H., Fukazawa, Y., and Uchio, Y. 2005. *Heterocycles*, **65**, 2675-2682. Five new sulfur-containing polybrominated indoles from the red alga *Laurencia brongniartii*. (together with new and known sulfur-containing bromoindoles)
- (4) EI-Gamel, A. A., Wang, W.-L., and Duh, C. Y. 2005. *J. Nat. Prod.*, **68**, 815-817. Sulfur-containing polybromoindoles from the Formosan red alga *Laurencia brongniartii*. (together with 5 new and 7 known sulfur-containing bromoindoles)
- (5) Fang, H.-Y., Chiou, S.-F., Uvarani, C., Wen, Z.-H., Hsu, C.-H., Wu, Y.-C., Wang, W.-L., Liaw, C.-C., and Sheu, J. H. 2014. *Bull. Chem. Soc. Jpn.*, **68**, 1278-1280. Cytotoxic, anti-inflammatory, and antibacterial sulfur-containing polybromoindoles from the Formosan red alga *Laurencia brongniartii*. (together with 4,5,6-tribromo-2-methylsulfinylindole, 11 known sulfur-containing bromoindoles)