

5103-1 (Indole)

Name: *N*-Methyl-2,3,5-tribromoindole; 1-Methyl-2,3,5-tribromoindole

{2,3,5-Tribromo-1-methyl-1*H*-indole}

Origin: *Laurencia brongniartii* (Caribbean Sea)⁽¹⁾;

Laurencia sp. (Layangan Island, Sabah, Malaysia)⁽²⁾;

Laurencia decumbens (South China Sea waters offshore Weizhou Islands, China)⁽³⁾;

Laurencia similis (the coast of Hainan Islands, China)^(4,5);

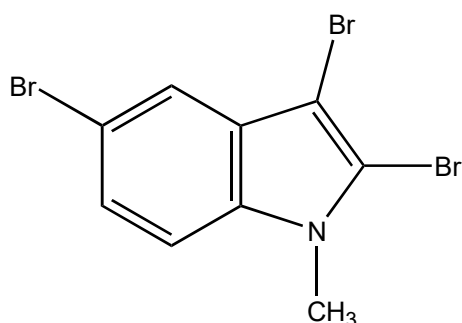
Aplysia dactylomela (La Parguera, Puerto Rico)⁽⁶⁾;

Formula: C₉H₆Br₃N

Mol. Wt.: 367.86

Opt. Rot.:

Mp.: 120-122⁽¹⁾; 124-124.8⁽⁶⁾; 121-122 (EtOAc/hexane)⁽⁷⁾



References and Notes

(1) Carter, G. T., Reinhart, K. L., Jr, Li, L. H., Kuentzel, S. L., and Connor, J. L. 1978. Tetrahedron Lett., **19**, 4479-4482. Brominated indoles from *Laurencia brongniartii*. (UV, ¹H-NMR, MS) (together with 1-methyl-2,3,6-tribromoindole, 1-methyl-2,3,5-tribromoindole, 1-methyl-2,3,5,6-tetrabromoindole, 2,3,5,6-tetrabromoindole)

(2) Vairappan, C. S., Ishii, T., Tan, K. L., Suzuki, M., and Zhaogi, Z. 2010. Marine Drugs, **8**, 1743-1749. Antibacterial activities of a new brominated diterpene from Borneon *Laurencia* spp.

(3) Ji, N.-Y., Li, X.-M., Cui, C.-M., and Wang, B.-G. 2007. Helv. Chim. Acta, **90**, 1731-1736. Terpenes and polybromoindoles from the marine red alga *Laurencia decumbens* (Rhodomelaceae).

(together with laurendecumtriol, 11-*O*-deacetylpinaterpenes C, pinaterpene C, obtusane, elatol, 1(10)-aristolene, bromoindoles)

(4) Ji, N.-Y., Li, X.-M., Ding, L.-P., and Wang, B. G. 2007. Helv. Chim. Acta, **90**, 385-391. Aristolane sesquiterpenes and highly brominated indoles from the marine red alga *Laurencia similis*

(Rhodomelaceae) (together with 1-methyl-3,5,6-tribromoindole, 1-methyl-2,3,5-tribromoindole, 3,5,6-tribromoindole, 2,3,6-tribromoindole, aristolane sesquiterpenes, elatol)

(5) Li, C.-S., Li, X.-M., Cui, C.-M., and Wang, B. G. 2010. Z. Naturforsch., **65b**, 87-89. Brominated metabolites from the marine red alga *Laurencia similis*. (together with 1-methyl-2,5-dibromoindole, 1-methyl-2,3,5-tribromoindole, aristolan-1-bromo-9,10-epoxide, six known compounds)

(6) **From the sea hare**: Schmitz, F. J., Michaud, D. P., and Schmidt, P. G. 1982. J. Am. Chem. Soc., **104**, 6415-6423. Marine natural products: Parguerol, deoxyparguerol, and isoparguerol. New brominated diterpenes with modified pimarane skeletons from the sea hare *Aplysia dactylomela*. (UV, IR, ¹H-NMR, MS) (together with parguerane-, deoxyparguerane-, isoparguerane-diterpenes, 2,3,5-tribromo-*N*-methylindole, elatol, allolaurinterol acetate, (*Z*)-10,15-dibromo-chamigra-1,3(15),7(14)-trien-9-ol, (*E*)-10,15-dibromo-chamigra-1,3(15),7(14)-trien-9-ol, isoobtusol acetate)

(Continue to 5103-2)

References and Notes

(Continue from 5103-1)

(7) **Synthesis**; Suarez-Castillo, O. R., Beiza-Granados, L., Melendez-Rodriguez, M., Alvarez-Hernandez, A., Morales-Rios, M. S., and Josepf-Nathan, P. 2006. *J. Nat. Prod.* **69**, 1596-1600. Synthesis of bromoindole alkaloids from *Laurencia brongniartii*. (**IR**, **¹H-NMR**, **¹³C-NMR**, **MS**)