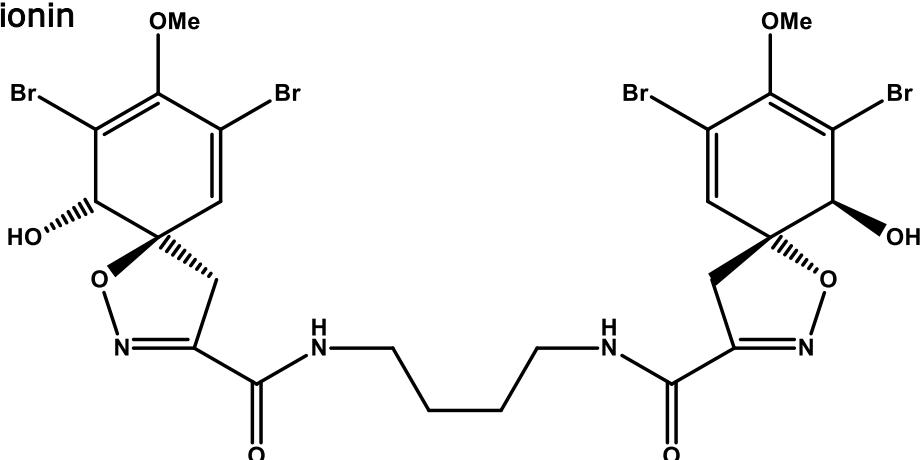


## Product Data Sheet

### Aerothionin



#### General description

Aerothionin is an alkaloid with two isoxazolin moieties and belongs to the bromotyrosine derivatives. It is a secondary metabolite that, amongst others, occurs in *A. cavernicola* in larger amounts.

#### Specific biological description

- antiproliferative effect against HeLa cells ( $EC_{50}$ : 29-42  $\mu M$ )
- shows antimycobacterial effect (*M. tuberculosis*, *M. kansasii*, *M. avium*, *M. scrofulaceum*)
- inhibition of adenonsin A<sub>1</sub> receptor
- activity against *P. falciparum* ( $IC_{50}$  [FcB-1]: 3.4  $\mu M$ ,  $IC_{50}$  [3D7]: 4.2  $\mu M$ )
- VDCC inhibition (75 % @ 18  $\mu M$ )

#### Purity

> 99 % (HPLC)

#### Appearance

solid

### Product properties

Chemical name (IUPAC)	(5S,5'S,10R,10'R)-N,N'-1,4-butandiylibis[7,9-dibromo-10-hydroxy-8-methoxy-1-Oxa-2-azaspiro[4.5]deca-2,6,8-triene-3-carboxamide]
Molecular formula	C <sub>24</sub> H <sub>26</sub> Br <sub>4</sub> N <sub>4</sub> O <sub>8</sub>
Molecular weight	818.10 g/mol
CAS Number	28714-26-3
PubChem CID	301120
SMILES	COC1=C(Br)C(O)C2(CC(=NO2)C(=O)NCCCCNC(=O)C3=NOC4(C3)C=C(Br)C(=C(Br)C4O)OC)C=C1Br
Solubility	ethanol, methanol und DMSO
Source	<i>Aplysina cavernicola</i>

„Squeeze the sponge's full potential“



## Product notes

Long term storage	-20 °C (protected from moisture)
Handling	Prepared solutions need to be stored in tightly sealed vials at -20 °C.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE, NOT FOR USE IN HUMANS.

## Product literature references

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- [3] J. A. Kalaitzis, P. de Almeida Leone, J. N. A. Hooper, R. J. Quinn *Nat. Prod. Res.* **2008**, *22*, 1257.
- [4] L. Mani, V. Jullian, B. Mourkazel, A. Valentin, J. Dubois, T. Cresteil, E. Folcher, J. N. A. Hooper, D. Erpenbeck, W. Aalbersberg, C. Debitus *Chem. Biodivers.* **2012**, *9*, 1436.
- [5] European Patent Application, EP 1 609 783 A1