

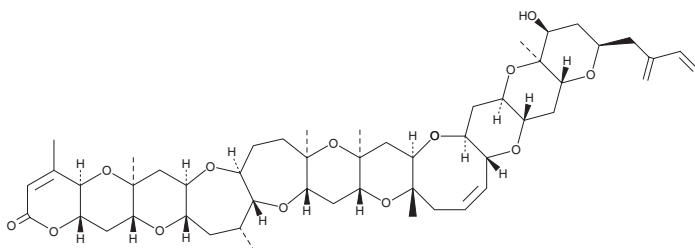
# PRODUCT INFORMATION



## Brevetoxin B

Item No. 10011498

**CAS Registry No.:** 79580-28-2  
**Formal Name:** brevetoxin B  
**Synonyms:** Brevetoxin 2, BTX-B, GbTx-2, PbTx-2  
**MF:** C<sub>50</sub>H<sub>70</sub>O<sub>14</sub>  
**FW:** 895.1  
**Purity:** ≥95%  
**Supplied as:** A film  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Brevetoxin B is supplied as a film. A stock solution may be made by dissolving the brevetoxin B in the solvent of choice, which should be purged with an inert gas. Brevetoxin B is soluble in the organic solvent ethyl acetate.

### Description

Brevetoxin B is a polyketide neurotoxin produced by *Karenia* species and other dinoflagellates. It binds to site 5 on the alpha subunit of voltage-gated sodium channels (IC<sub>50</sub> = 15 nM) on neurons at the neuromuscular junction, causing the channel to open irreversibly at potentials more negative than normal, discharging action potentials repetitively.<sup>1,2</sup> Brevetoxin B is ichthyotoxic at nanomolar concentrations and is responsible for an illness described as neurotoxic shellfish poisoning.<sup>2</sup>

### References

1. Atchison, W.D., Luke, V.S., Narahashi, T., *et al.* Nerve membrane sodium channels as the target site of brevetoxins at neuromuscular junctions. *Br. J. Pharmacol.* **89(4)**, 731-738 (2016).
2. Gawley, R.E., Rein, K.S., Jeglitsch, G., *et al.* The relationship of brevetoxin 'length' and A-ring functionality to binding and activity in neuronal sodium channels. *Chem. Biol.* **2(8)**, 533-541 (1995).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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