13-Desmethyl Spirolide C is a cyclic imine marine toxin initially produced by species of the dinoflagellate *Alexandrium*. Spirolide C is a fast-acting shellfish poison that inhibits a variety of nicotinic acetylcholine receptors (nAChRs) such as α7, α4β2, and α3β4. Spirolide C inhibits nAChRs in skeletal muscle, producing neuromuscular block, and in neurons, decreasing action potential duration. This compound also inhibits muscarinic acetylcholine receptors (mAChRs). Additionally, spirolide C increases levels of N-acetyl aspartate and synaptophysin and decreases levels of amyloid-β (Aβ) in the hippocampus of transgenic Alzheimer’s disease mouse models.

References


Caution: This product is intended for laboratory and research use only. It is not for human or drug use.