

Domoic acid, Marine natural product neurotoxin

Catalog	Unit
TBI2472-50UG	50 ug

Product Details

Formal Name: (2S,3S,4S)-2-Carboxy-4-[(1Z,3E,5R)-5-carboxy-1-methyl-1,3-hexadien-1-yl]-3-pyrrolidineacetic acid

Molecular Formula: C₁₅H₂₁NO₆

Formula Weight: 311.30

CAS Number: 14277-97-5

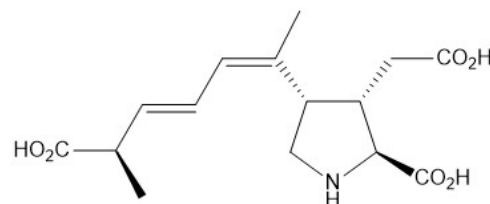
Purity: >97%

Formulation: Soln in water with 5% acetonitrile at 50 µg / 0.5 ml

Solubility: Soluble in Water

Storage: -20°C

Stability: ≥ 2 years.



Applications

Marine natural product neurotoxin

Functions

Domoic acid (DA), a kainic acid-type neurotoxin produced by certain species of the marine pennate diatom *Pseudo-nitzschia* is responsible for amnesic shellfish poisoning. Suspension feeders such as bivalve mollusks can accumulate and retain high amounts of DA in their tissues, threatening human health. DA is a potent agonist at kainate and AMPA receptors and induces convulsive behavior and seizures in rodents. It induces structural and molecular changes in the developing zebra fish nervous system.

Application Procedures

First dissolved in Water, then diluted to aqueous buffer.

For research use only.