



## Product Information

**Product ID** O4104

**CAS No.** 209266-80-8

**Chemical Name** 9,10-Deepithio-9,10-didehydroacanthifolicin sodium salt

**Synonym**

**Formula** C<sub>44</sub>H<sub>67</sub>O<sub>13</sub>Na

**Formula Wt.** 827.0

**Melting Point** 164-166 °C

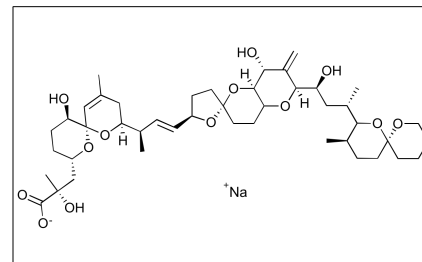
**Purity** ≥98%

**Solubility** Soluble in ethanol, DMSO,  
or water.

**Store Temp** -20 °C

**Ship Temp** Ambient

**Description** Okadaic acid is a diarrhetic shellfish toxin initially produced by dinoflagellates and sea sponges; it exhibits neurotoxic and anticancer activities. Okadaic acid inhibits protein phosphatases 1 and 2A (PP1, PP2A). In animal models of Alzheimer's disease, okadaic acid increases phosphorylation of tau protein. In adipocytes, this compound stimulates lipolysis by increasing phosphorylation of perilipin A and B. In T cell leukemia cells, okadaic acid induces G1 phase cell cycle arrest, decreases expression of cyclin D2, CDK4, CDK6, Bcl-2, Bcl-xL, and XIAP, increases expression of p21 and p27, activates caspases, and inhibits cell growth.



**Bulk quantities available upon request**

Product ID	Size
O4104	25 µg
O4104	100 µg
O4104	1 mg

**References** Kamat PK, Rai S, Swarnkar S, et al. Molecular and Cellular Mechanism of Okadaic Acid (OKA)-Induced Neurotoxicity: A Novel Tool for Alzheimer's Disease Therapeutic Application. *Mol Neurobiol.* 2014 Apr 8. [Epub ahead of print]. PMID: 24710687.

Chang NC, Lin AC, Hsu CC, et al. Okadaic Acid, a Bioactive Fatty Acid from *Halichondria okadai*, Stimulates Lipolysis in Rat Adipocytes: The Pivotal Role of Perilipin Translocation. *Evid Based Complement Alternat Med.* 2013;2013:545739. PMID: 24319476.

Mori N, Ishikawa C, Uchihara JN, et al. Protein phosphatase 2A as a potential target for treatment of adult T cell leukemia. *Curr Cancer Drug Targets.* 2013 Oct;13(8):829-42. PMID: 24015987.

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