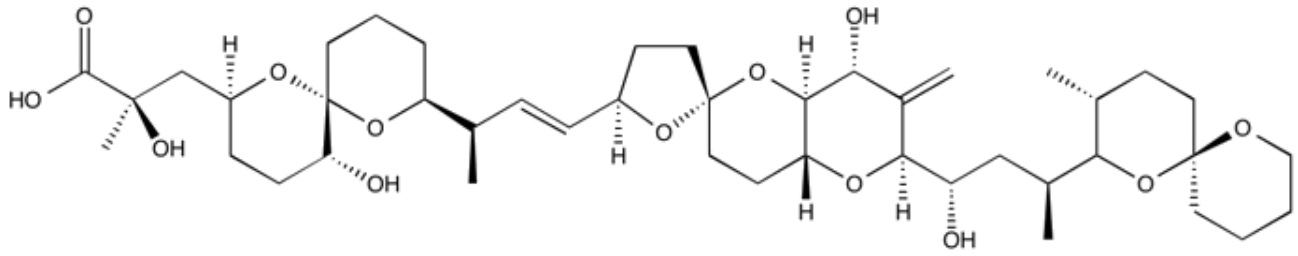
Catalog # 10-2091

Okadaic acid

CAS# 78111-17-8

Isolated from marine dionflagellates

Lot # X101615



A naturally occurring polyether marine toxin. Potent and selective inhibitor of protein phosphatases inhibiting PP2A completely at 1 nM and PP1 at higher concentrations, while PP2C is not inhibited. It is an extremely useful tool for studying cellular protein phosphorylation[2]. Induces apoptosis in a variety of cell types[3]. Activates atypical protein kinase isotypes and induces insulin-like effects in adipocytes[4]. Caution: SKIN IRRITANT, TUMOR PROMOTOR. Avoid contact..

1) Cohen *et al*. (1990), *Okadaic acid: a new probe for the study of cellular regulation*; Trends Biochem. Sci., **15** 98

2) Hardie *et al*. (1991), *Use of okadaic acid to inhibit protein phosphatases in intact cells*; Clin. Methods Enzymol., **201** 469

3) Haneji *et al*. (2013), *Okadaic acid activates the PKR pathway and induces apoptosis through PKR stimulation in MG63 osteoblast-like cells*; J. Oncol., **42** 1904

4) Standaert *et al*. (1999), *Okadaic acid activates atypical protein kinase C (zeta/lambda) In rats and 3T3/L1 adipocytes. An apparent requirement for activation of Glut4 translocation and glucose transport*; J. Biol. Chem, **274** 14074

PHYSICAL DATA

Molecular Weight:	805.00
Molecular Formula:	$C_{44}H_{68}O_{13}$
Purity:	98% by TLC
Solubility:	DMSO (up to 40 mg/ml), or Ethanol (up to 5 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

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