

**Product Name:** Resiniferatoxin

**Catalog No.:** 1137

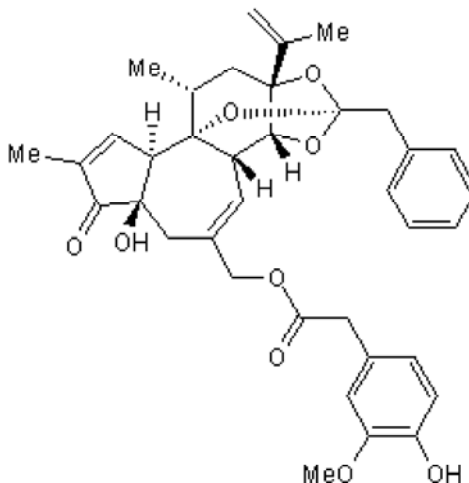
**Batch No.:** 12

CAS Number: 57444-62-9

IUPAC Name: 4-Hydroxy-3-methoxy-[(2*S*,3*aR*,3*bS*,6*aR*,9*aR*,9*bR*,10*R*,11*aR*)-3*a*,3*b*,6,6*a*,9*a*,10,11,11*a*-octahydro-6*a*-hydroxy-8,10-dimethyl-11*a*-(1-methylethenyl)-7-oxo-2-(phenylmethyl)-7*H*-2,9*b*-epoxyazuleno[5,4-*e*]-1,3-benzodioxol-5-yl]benzeneacetate

## 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>37</sub> H <sub>40</sub> O <sub>9</sub>
<b>Batch Molecular Weight:</b>	628.72
<b>Physical Appearance:</b>	White solid
<b>Solubility:</b>	DMSO to 100 mM ethanol to 50 mM
<b>Storage:</b>	Desiccate at -20°C
<b>Batch Molecular Structure:</b>	



## 2. ANALYTICAL DATA

<b>TLC:</b>	R <sub>f</sub> = 0.48 (Acetone:Hexane [50:50])
<b>HPLC:</b>	Shows 99.7% purity

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Potent analog of capsaicin that is an agonist at vanilloid receptors ( $K_i = 43$  pM). Like capsaicin, it acts as a selective modulator of primary afferent neurons.

**Physical and Chemical Properties:**

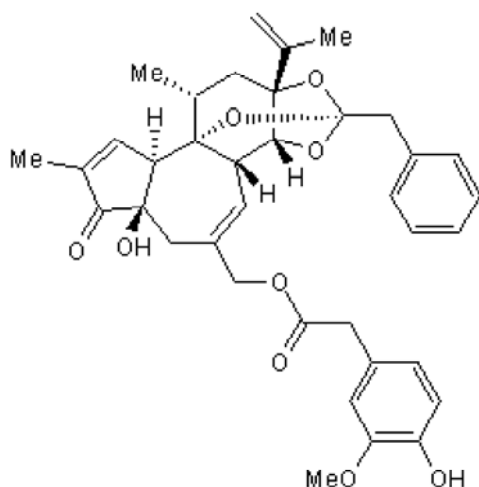
Batch Molecular Formula: C<sub>37</sub>H<sub>40</sub>O<sub>9</sub>

Batch Molecular Weight: 628.72

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Desiccate at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 50 mM

This product is supplied in a sealed glass ampoule as a lyophilized solid, please refer to the Tocris catalogue for opening instructions. Lyophilized solids can be hard to visualize therefore solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Acs et al** (1996) Distinct structure-activity relations for stimulation of <sup>45</sup>Ca uptake and for high affinity binding in cultured rat dorsal root ganglion neurons and dorsal root ganglion membranes. *Brain Res.Mol.Brain Res.* **35** 173. PMID: 8717353.

**Szolcsanyi et al** (1990) Resiniferatoxin: an ultrapotent selective modulator of capsaicin-sensitive primary afferent neurons. *J.Pharmacol.Exp.Ther.* **255** 923. PMID: 2243359.

**Winter et al** (1990) Cellular mechanism of action of resiniferatoxin: a potent sensory neuron excitotoxin. *Brain Res.* **520** 131. PMID: 2169951.

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