

Xestospongins C, Inhibits IP3-mediated Ca²⁺ release

Catalog	Unit
TBI1207-10UG	10 ug
TBI1207-50UG	50 ug

Product Details

Formal Name: Natural product isolated from the marine sponge Xestospongia sp.

Molecular Formula: C₂₈H₅₀N₂O₂

Formula Weight: 446.70

CAS Number: 88903-69-9

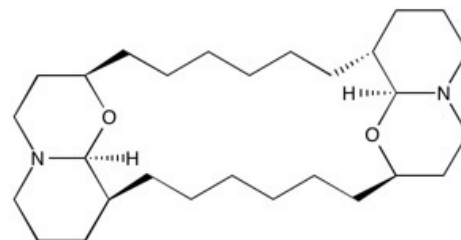
Purity: >97%

Formulation: Lyophilized

Solubility: Soluble in DMSO (up to 10 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

Inhibits IP3-mediated Ca²⁺ release

Functions

A potent and reversible inhibitor of IP3-mediated Ca²⁺ release, IC₅₀ = 358 nM. Experiments with guinea-pig ileum permeabilized with alpha toxin revealed that Xestospongins C inhibits the IP3 receptor but not the ryanodine receptor in SR membranes. In intact smooth muscle cells it inhibits voltage-dependent Ca²⁺ and K⁺ currents at a concentration range similar to that at which it inhibits the IP3 receptor. It is a useful tool for probing the involvement of IP3 receptors in cellular signaling. Cell permeable.

Application Procedures

First dissolved in DMSO (up to 10 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 month.

For research use only.