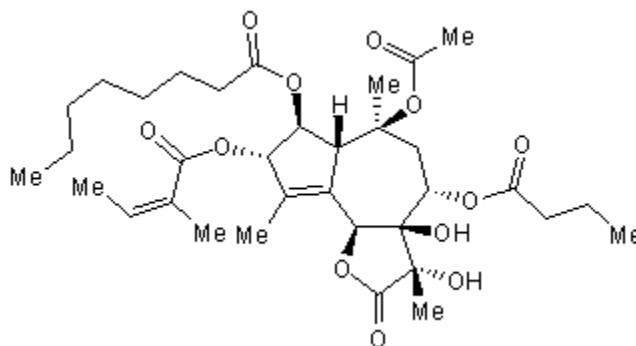


Thapsigargin

Cat. No. 1138



Chemical Name: (3*S*,3*aR*,4*S*,6*S*,6*AR*,7*S*,8*S*,9*bS*)-6- (Acetyloxy)-2,3,3*a*,4,5,6,6*a*,7,8,9*b*-decahydro-3,3*a*-dihydroxy-3,6,9-trimethyl-8-[[[(2*Z*)-2-methyl-1-oxo-2-butenyl]oxy]-2-oxo-4-(1-oxobutoxy)azuleno[4,5-*b*]furan-7-yl] octanoate

Biological Activity

Potent inhibitor of sarco-endoplasmic reticulum Ca²⁺-ATPases. Causes ER stress; can be used to induce autophagy in mammalian cells.

Technical Data

M.Wt:

650.76

Formula:

C₃₄H₅₀O₁₂

Solubility:

Soluble to 100 mM in DMSO

Purity:

>97 %

Storage:

Desiccate at -20°C

CAS No:

67526-95-8

The technical data provided above is for guidance only.

For batch specific data refer to the Certificate of Analysis.

References

Davidson and Varhol (1995) Kinetics of thapsigargin-Ca²⁺-ATPase (sarco-plasmic reticulum) interaction reveals a two-step binding mechanism and picomolar inhibition. *J.Biol.Chem.* **270** 11731. PMID: [7744817](#).

Treiman *et al* (1998) A tool coming of age: thapsigargin as an inhibitor of sarco-endoplasmic reticulum Ca²⁺-ATPases. *TIPS* **19** 131. PMID: [9612087](#).

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Yu et al (1998) Specific substitutions at amino acid 256 of the sarcoplasmic/endoplasmic reticulum Ca²⁺ transport ATPase mediate resistance to thapsigargin in thapsigargin-resistant hamster cells. *J.Biol.Chem.* **273** 3542. PMID:[9452480](#).

Ding et al (2007) Differential effects of endoplasmic reticulum stress-induced autophagy on cell survival. *J.Biol.Chem.* **282** 4702. PMID: [17135238](#).

If you know of a relevant citation for this product [please let us know](#).

Keywords: Thapsigargin, supplier, Potent, inhibitor, SERCA, ATPase, Ca²⁺, modulators, Ca²⁺-ATPase, Signaling, Signalling, Calcium-ATPase, P-type, Transporters, Ion, Pumps

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