

Ionomycin Calcium Salt

Catalog Number :5608212

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: IONOMYCINCALCIUMSALT

Chemical Name: calcium;(4R,6S,8S,10Z,12R,14R,16E,18R,19R,20S,21S)-19,21-dihydroxy-22-[(2S,5S)-5-[(2R,5S)-5-[(1R)-1-hydroxyethyl]-5-methyloxolan-2-yl]-5-methyloxolan-2-yl]-4,6,8,12,14,18,20-heptamethyl-11-oxido-9-oxodocosa-10,16-dienoate

Molecular Formula: C₄₁H₇₀O₉ Ca

Molecular Weight: 747.1

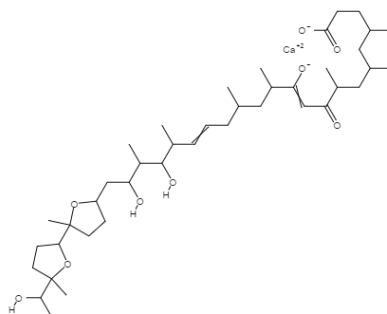
CAS Number: 56092-82-1

Purity: ≥98%

Applications: FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.



Description

Ionomycin is an ionophore discovered in *Streptomyces conglobatus* and used in the study of intracellular calcium. It is also reported to stimulate the intracellular production of IL-2, IL-4 and perforin. It is supplied as a calcium salt for ease of storage.

Preparation & Storage

Soluble in organic solvents such as ethanol or DMSO. DMSO up to 1.5 mg/ml.

References

- 1.Liu, C. M., Hermann, T. E. (1978). Characterization of ionomycin as a calcium ionophore.;*Journal of Biological Chemistry*;;253(17), 5892-5894.
2. Morgan, A. J., Jacob, R. (1994). Ionomycin enhances Ca²⁺ influx by stimulating store-regulated cation entry and not by a direct action at the plasma membrane.;*Biochem. J.*;;300, 665-672.
3. Elzi, D. J., Bjornsen, A. J., MacKenzie, T., Wyman, T. H., Silliman, C. C. (2001). Ionomycin causes activation of p38 and p42/44 mitogen-activated protein kinases in human neutrophils.;*American Journal of Physiology-Cell Physiology*;;281(1), C350-C360.