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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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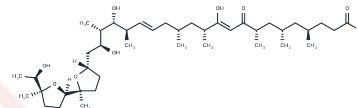
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Ionomycin

Chemical Properties

CAS No. :	56092-81-0
Formula:	C ₄₁ H ₇₂ O ₉
Molecular Weight:	709.01
Appearance:	no data available
Storage:	store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Ionomycin is an calcium ionophore and an antibiotic that binds calcium ions (Ca ²⁺). It is produced by the bacterium <i>Streptomyces conglobatus</i> . It is used in research to raise the intracellular calcium level (Ca ²⁺) and as a research tool to understand Ca ²⁺ transport across biological membranes. Ionomycin promotes apoptosis and induces the activation of protein kinase C (PKC).
Targets(IC50)	Calcium Channel
In vitro	Ionomycin (2 μM) induced cell death in LCLC 103H cells, derived from a human large cell lung carcinoma, by inducing calpain activation promotes decrease of Bcl-2 proteins thereby triggering the intrinsic apoptotic pathway [2]. Ionomycin also phosphorylate p38 MAPK by Ca ²⁺ influx through SOCE, leading to suppression of TNF-α-induced NF-κB phosphorylation[3].

Solubility Information

Solubility	Ethanol: 90.0 mg/mL (126.9 mM), Sonication is recommended. DMSO: 90.0 mg/mL (126.9 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4104 mL	7.0521 mL	14.1042 mL
5 mM	0.2821 mL	1.4104 mL	2.8208 mL
10 mM	0.141 mL	0.7052 mL	1.4104 mL
50 mM	0.0282 mL	0.141 mL	0.2821 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Lautens M, et al. Total synthesis of ionomycin using ring-opening strategies. Org Lett. 2002 May 30;4(11):1879-82.
Zhang Y, Shi Q, Wang P, et al. iPSC-derived NK cells with site-specific integration of CAR19 and IL24 at the multi-

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