



Product Information

Product ID I5753

CAS No. 56092-82-1

Chemical Name

Synonym ATCC 31005

Formula $C_{41}H_{70}O_9$ Ca

Formula Wt. 747.07

Melting Point 204-206°C

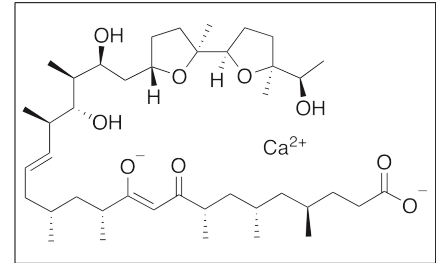
Purity ≥98%

Solubility Soluble in ethanol to
100mM, DMSO to 25mM.
5mg/ml in methanol

Store Temp 4°C

Ship Temp Ambient

Description Ionomycin is a polyether antibiotic that acts as a Ca^{2+} ionophore, modulating intracellular Ca^{2+} signaling to increase cytosolic Ca^{2+} levels. Ionomycin modulates Ca^{2+} signaling across many cell types and its depletion of intracellular Ca^{2+} stores may be linked to the induction of apoptosis.



Bulk quantities available upon request

Product ID	Size
I5753	1 mg
I5753	5 mg
I5753	10 mg

References Müller MS, Obel LF, Waagepetersen HS, et al. Complex actions of ionomycin in cultured cerebellar astrocytes affecting both calcium-induced calcium release and store-operated calcium entry. *Neurochem Res.* 2013 Jun;38(6):1260-5. PMID: 23519933.

Dedkova EN, Sigova AA, Zinchenko VP. Mechanism of action of calcium ionophores on intact cells: ionophore-resistant cells. *Membr Cell Biol.* 2000;13(3):357-68. PMID: 10768486

Reynolds JE, Eastman A. Intracellular calcium stores are not required for Bcl-2-mediated protection from apoptosis. *J Biol Chem.* 1996 Nov 1;271(44):27739-43. PMID: 8910367.

Mason MJ, Grinstein S. Ionomycin activates electrogenic Ca^{2+} influx in rat thymic lymphocytes. *Biochem J.* 1993 Nov 15;296 (Pt 1):33-9. PMID: 8250855.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.