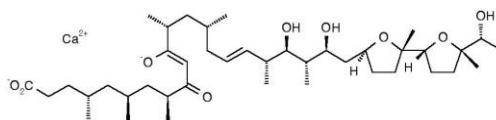


Ionomycin

A potent and selective calcium ionophore

Product Information

Name :	Ionomycin, calcium salt	Ionomycin, free acid
Catalog Number :	FP-53989A, 1 mg FP-53989B, 5 mg FP-53989C, 10 mg FP-53989D, 25 mg	FP-779011, 1 mg
Structure :	C ₄₁ H ₇₀ CaO ₉ – CAS : 56092-82-1	C ₄₁ H ₇₂ O ₉ -CAS : 56092-81-0
Molecular Weight :	MW= 747.09	MW= 709.03
Absorption / Emission :	Solubility: DMSO, ethanol	Solubility: DMSO, methanol
EC (M⁻¹ cm⁻¹) :	$\lambda_{exc} \backslash \lambda_{em} = 300 \text{ nm/negligible}$ 22 000	$\lambda_{exc} \backslash \lambda_{em} = 300 \text{ nm/negligible}$ 22 000



WARNING ! Toxic. LD50 of < 500 mg / kg.
May be Carcinogenic / Teratogenic. Protect from Light.

Storage: -20°C recommended. Protect from light and moisture

Introduction

Ionomycin is extracted from *Streptomyces conglobatus*.

Ionomycin Calcium salt is an antibiotic that acts as a potent and selective calcium ionophore; more effective than A23187. It is commonly used both to modify intracellular Ca²⁺ concentrations and to calibrate fluorescent Ca²⁺ indicators. Ionomycin binds Ca²⁺ in the 7.0-9.5 pH range with the resulting complex exhibiting intense UV absorption. (Liu, 1978; Kauffman, 1980)

Ionomycin also transports other ions (Pb²⁺ and some other divalent cations, several lanthanide trivalent cations).

Ionomycin induces apoptosis in immature B cell lines, for example, in Burkitt lymphoma cells, and in cultured embryonic rat cortical neurons. More mature B cell lines do not undergo apoptosis, but are arrested in the G1 phase of the cell cycle (Takei, 1994; Aagaard, 1995).

References

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- **Liu, C. and Hermann T.** "Characterization of ionomycin as a calcium ionophore." *J. Biol. Chem.* **253**: 5892-5894 (1978) [Article](#)
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Related products

- Fluo-8 NW, [CJ2560](#)
- Rhod-4 AM, [CQ6061](#)
- Phorbol-12-Myristate-13-Acetate, [231451](#)

Ordering information

Catalog size quantities and prices may be found at <http://www.interbiotech.com>
Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06

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