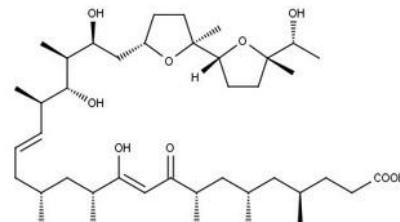


Ionomycin, Ca²⁺ ionophore

Catalog	Unit
TBI2079 - 1MG	1 mg
TBI2079 - 5MG	5 mg

Product Details

Formal Name: Fermentation product from *Streptomyces conglobatus*
Molecular Formula: C₄₁H₇₂O₉
Formula Weight: 709.0
CAS Number: 56092-81-0
Purity: >99%
Formulation: Colorless wax.
Solubility: Soluble in DMSO (up to 10 mg/ml) or in Ethanol (30 mg/ml).
Storage: -20°C
Stability: ≥ 2 years.



Applications

Ca²⁺ ionophore

Functions

Ionomycin (56092-81-0) is a highly selective nonfluorescent calcium (Ca²⁺) ionophore. Induces a rapid rise in cytosolic Ca²⁺ in human neutrophils which is due to both release from cytosolic Ca²⁺ stores as well as Ca²⁺ influx. It activates (2 μM) and primes (20-200 nM) neutrophil NADPH oxidase. Down regulates beta-catenin/Tcf signaling in a colon cancer cell line via suppressing the binding of Tcf to its specific DNA-binding site. In rat hepatoma cells, sub-lethal ionomycin activates the stress response by activating SAPK/JNK and HSF/HSE interaction leading to upregulation of HSP70 biosynthesis.

Application Procedures

First dissolved in DMSO (up to 10 mg/ml) or in Ethanol (30 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

Relative Products

TBI1170	Mitomycin C
TBI1345	E64, Cysteine protease inhibitor
TBI1347	E64d, Cysteine protease inhibitor
TBI2064	Chromomycin A3
TBI2069	Cytochalasin B
TBI2794	5-EDU, DNA Click labeling probe
TBI2071	Cytochalasin D
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI2140	Gemcitabine
TBI2058	Aphidicolin, DNA polymerase Inhibitor

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