

| Catalog | Unit |
|---------------|------|
| TBI2078 - 1MG | 1 mg |
| TBI2078 - 5MG | 5 mg |

Product Details

Formal Name: 1,19R,21S-trihydroxy-4R,6S,8S,12R,14R,18R,20S-heptamethyl-22-[octahydro-5'S-[1R-hydroxyethyl]-2S,5'-dimethyl[2,2'R-bifuran]-5S-y]-9-oxo-10Z,16E-docosadienoic acid, calcium salt.

Fermentation Product: from *Streptomyces conglobatus*.

Molecular Formula: C₄₁H₇₀O₉ • Ca.

Formula Weight: 747.1.

CAS Number: 56092-82-1

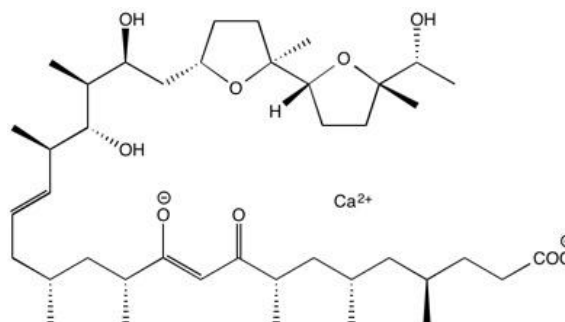
Purity: ≥98%

Formulation: Powder.

Solubility: Soluble in DMSO (up to 10 mg/ml) or in Ethanol (up to 30 mg/ml).

Storage: -20°C.

Stability: ≥ 2 years.



Applications

Ca²⁺ Ionophore.

Functions

Highly selective nonfluorescent calcium (Ca²⁺) ionophore. In human neutrophils it induces a rapid rise in cytosolic Ca²⁺ which is due to both release from cytosolic Ca²⁺ stores as well as Ca²⁺ influx. It activates (2 mM) 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 iononycin activates the stress response by activating SAPK/JNK and HSF/HSE interaction leading to upregulation of HSP70 biosynthesis.

Application Procedures

Iononycin calcium can be first dissolved in DMSO (up to 10 mg/ml) or ethanol (up to 30mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 2 months.

Relative Products

| | |
|---------|--|
| TBI1092 | AICAR, AMPK activator |
| TBI2069 | Cytochalasin B |
| TBI2073 | Forskolin, Adenylate cyclase activator |
| TBI1286 | Bestatin, Aminopeptidase inhibitor |
| TBI1029 | Dorsomorphin, AMPK inhibitor |
| TBI1368 | Pepstatin, Aspartic protease inhibitor |
| TBI1060 | Imatinib, Bromodomain inhibitor |
| TBI1584 | JQ1+, Bromodomain inhibitor |
| TBI2284 | Calcimycin, Ca ²⁺ Ionophore |

For research use only.