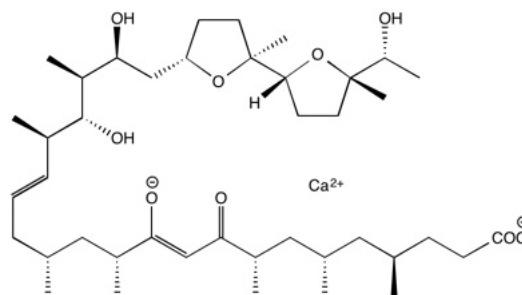


Catalog	Unit
TBI2078-1MG	1 mg
TBI2078-5MG	5 mg

### Product Details

**Fermentation Product:** from *Streptomyces conglobatus*.  
**Molecular Formula:** C<sub>41</sub>H<sub>70</sub>O<sub>9</sub> • Ca.  
**Formula Weight:** 747.1.  
**CAS Number:** 56092-82-1  
**Purity:** ≥99%  
**Formulation:** Powder.  
**Solubility:** Soluble in DMSO (10 mg/ml) or in Ethanol (30 mg/ml).  
**Storage:** -20°C.  
**Stability:** ≥ 2 years.



### Applications

Ca<sup>2+</sup> Ionophore.

### Functions

Highly selective nonfluorescent calcium (Ca<sup>2+</sup>) ionophore. In human neutrophils it induces a rapid rise in cytosolic Ca<sup>2+</sup> which is due to both release from cytosolic Ca<sup>2+</sup> stores as well as Ca<sup>2+</sup> 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

Ionomycin calcium can be dissolved first in DMSO (10 mg/ml) or ethanol (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 <sup>2+</sup> Ionophore

**For research use only.**