

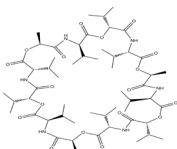
PRODUCT: Valinomycin

ALTERNATE NAME: Cyclo(D- α -hydroxyisovaleryl-D-valyl-L-lactoyl-L-valyl-D- α -hydroxyisovaleryl-D-valyl-L-lactoyl-L-valyl-D- α -hydroxyisovaleryl-D-valyl-L-lactoyl-L-valyl)

CATALOG #: 2238-10, 50

AMOUNT: 10 mg, 50 mg

STRUCTURE:



MOLECULAR FORMULA: C₅₄H₉₀N₆O₁₈

MOLECULAR WEIGHT: 1111.32

CAS NUMBER: 2001-95-8

APPEARANCE: A white solid

SOLUBILITY: DMSO (25 mM) or EtOH (25 mM)

PURITY: \geq 99%

STORAGE: At -20 °C. Protect from light and moisture

DESCRIPTION: A highly selective K⁺- ionophore. It binds potassium ions (K⁺) and facilitates their transfer across lipid bilayers. Inhibits Ca²⁺-ATPase activity and promotes cell death by mitochondrial swelling and autophagic processes, but not apoptosis. Antagonizes endothelin-induced vasoconstriction (IC₅₀ = 0.3 μ M). Valinomycin is a large macrocyclic toxic molecule peptidic potassium ion transporter that inhibits SARS-CoV *in vitro*.

REFERENCE: Klein, B., *et al.* (2011). *Apoptosis* **16**, 1101-1117.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

Ionomycin, Calcium Salt (**Cat. No. 1566-5**)
Ionomycin, Free Acid (**Cat. No. 1565-5**)
Monensin Methyl Ester (**Cat. No. 1808-50, 250**)
Nigericin sodium salt (**Cat. No. 2096-5, 25**)

USAGE: **FOR RESEARCH CH USE ONLY! Not to be used in humans**