

Nigericin . sodium salt

Potassium ionophore

Nigericin is an antibiotic isolated *Streptomyces hygroscopicus* that acts as an H^+ , K^+ , Na^+ , Pb^{2+} ionophore. Similarly to Valinomycin (Prod. No. BML-KC140), Nigericin is most commonly an antiporter of H^+ and K^+ across biological membranes. Nigericin stimulates Ca^{2+} release from mitochondrial stores by disruption of membrane potential. Nigericin also activates NALP3 inflammasome and induces the release of IL-1 β .

Citations: 26

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Ordering Information

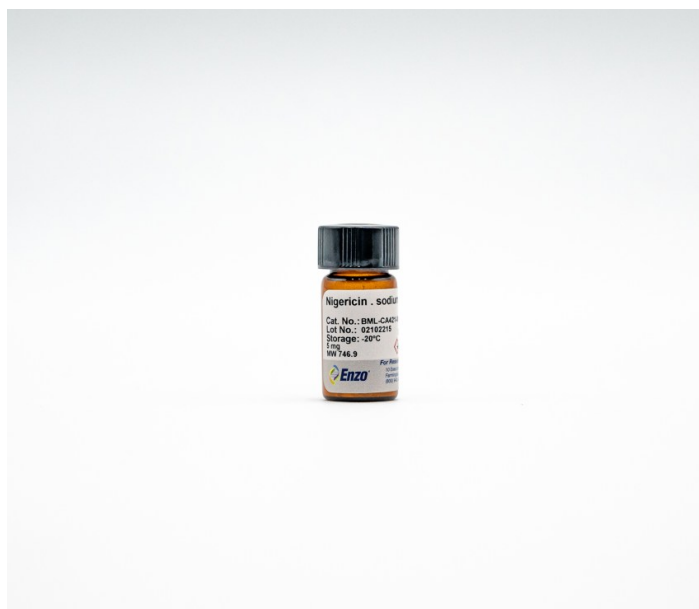
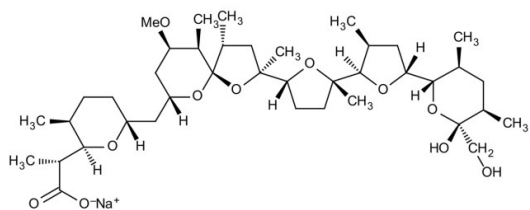
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BML-CA421-0005	5mg
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Manuals, SDS & CofA

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- Potassium ionophore used to disrupt intracellular H^+ and K^+ levels
- Compound used to alter cell volume, membrane potential, and pH
- NALP3 inflammasome activator



Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended.

Long Term Storage -20°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name Antibiotic K 178

Appearance White to off-white solid.

CAS 28643-80-3; 28380-24-7

Couple Target Potassium

Couple Type Activator

Formula $C_{40}H_{67}O_{11} \cdot Na$

Identity Identity determined by NMR.

MI 14: 6541

MW 746.9

Purity ≥98% (HPLC, TLC)

Solubility Soluble in dichloromethane (10mg/ml), DMSO (10mg/ml, heating may be required), ethyl acetate, 100% ethanol (5mg/ml), and 100% methanol (10mg/ml).

Source *Streptomyces hygroscopicus*

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