

Gramicidin A, Channel-forming ionophore

Catalog	Unit
TBI3556-1MG	1 mg
TBI3556-5MG	5 mg

Product Details

Formal Name: "HCO-Val-Gly-Ala-D-Leu-Ala-D-Val-Val-D-Val-Trp-D-Leu-Trp-D-Leu-Trp-NHCH₂CH₂OH"

Alternate Names: Peptide fermentation product isolated from B brevis

Molecular Formula: C₉₉H₁₄₀N₂₀O₁₇

Formula Weight: 1882.3

CAS Number: 11029-61-1

Purity: ≥95%

Formulation: Powder

Solubility: Soluble in DMSO (up to 35 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.

Applications

Channel-forming ionophore

Functions

A hydrophilic non-ribosomal peptide ionophore that forms channels in membranes which are monovalent cation-permeable. Disruption of cellular ionic homeostasis is the basis for its antibiotic activity. It is also cytotoxic to a variety of cancer cell lines and tumor xenografts. Gramicidin A was shown to stimulate melanoma differentiation-associated protein 5 (MDA5)-mediated IFN signaling by enhancing its oligomerization onto RNA and thus represents a new tool to manipulate MDA5 activity.

Application Procedures

First dissolved in DMSO (up to 35 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 month.

For research use only.