

Bongkrelic acid

Chemical Properties

CAS No. : 11076-19-0

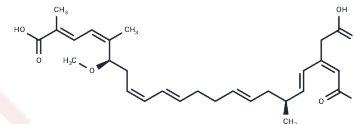
Formula: C₂₈H₃₈O₇

Molecular Weight: 486.60

Store at low temperature

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Bongkrelic acid (Bongkrelic Acid (ammonium salt)) is a mitochondrial toxin secreted by Burkholderia gladioli that inhibits adenine nucleotide translocase (ANT). Bongkrelic acid induces extracellular traps in neutrophils through signaling mediated by p38, ERK, PAD4, and P2X1.
Targets(IC50)	ATPase, ERK, P2X Receptor, p38 MAPK, PAD

Solubility Information

Solubility	DMSO: 80 mg/mL (164.41 mM), Sonication is recommended. H ₂ O: 1 mg/mL (2.06 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0551 mL	10.2754 mL	20.5508 mL
5 mM	0.411 mL	2.0551 mL	4.1102 mL
10 mM	0.2055 mL	1.0275 mL	2.0551 mL
50 mM	0.0411 mL	0.2055 mL	0.411 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Anwar M, et al. Bongkreic Acid-a Review of a Lesser-Known Mitochondrial Toxin. J Med Toxicol. 2017 Jun;13(2): 173-179. doi: 10.1007/s13181-016-0577-Epub 2017 Jan 19.

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Han D, et al. Bongkreic Acid and Burkholderia gladioli pathovar cocovenenans: Formidable Foe and Ascending Threat to Food Safety. Foods. 2023 Oct 26;12(21):3926.

Kano A, et al. Bongkreic acid facilitates glycolysis in cultured cells and induces cell death under low glucose conditions. Biochem Biophys Rep. 2019 Aug 29;20:100683.

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