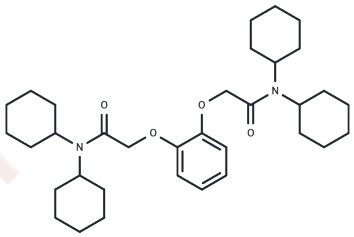
Data Sheet (Cat.No.T3956)

TargetMol

Sodium ionophore III

Chemical Properties



CAS No. : 81686-22-8

Formula: C34H52N2O4

Molecular Weight: 552.79

Appearance: no data available

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

Biological Description

Description	Sodium ionophore III (ETH2120) is a Na+ ionophore ideal for testing sodium activity in plasma, serum, and blood.
Targets(IC50)	Sodium Channel
In vitro	Preincubation of the cells with Sodium ionophore III not only completely abolished ATP synthesis but stimulated caffeate reduction. The addition of Sodium ionophore III to cells in the steady state of caffeate reduction dissipated the intracellular ATP level[1]. Lactate-sulfate grown cells are insensitive to Sodium ionophore III. The Sodium ionophore III ligand is a very effective receptor for the Am3+ and Eu3+ cations.

Solubility Information

Solubility	DMSO: Slightly soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.809 mL	9.045 mL	18.0901 mL
5 mM	0.3618 mL	1.809 mL	3.618 mL
10 mM	0.1809 mL	0.9045 mL	1.809 mL
50 mM	0.0362 mL	0.1809 mL	0.3618 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.

Reference

Imkamp F, et al. Chemiosmotic energy conservation with Na(+) as the coupling ion during hydrogen-dependent caffeate reduction by Acetobacterium woodii. J Bacteriol. 2002 Apr;184(7):1947-51.

Wang L, et al. The role of Rnf in ion gradient formation in Desulfovibrio alaskensis. PeerJ. 2016 Apr 14;4:e1919.

Makrlík, E., Kvíčalová, M. & Vaňura, P. J Solution Chem (2016) 45: 463. https://doi.org/10.1007/s10953-016-0447-0

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