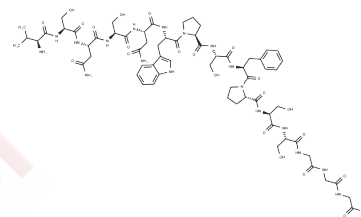


Caloxin 2A1

Chemical Properties

CAS No. :	350670-85-8
Formula:	C64H91N19O22
Molecular Weight:	1478.543
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Caloxin 2A1 is an inhibitor peptide of the plasma membrane Ca ²⁺ -ATPase (PMCA) responsible for extracellular signaling. Importantly, Caloxin 2A1 has no impact on the basal Mg ²⁺ -ATPase or Na ⁺ -K ⁺ -ATPase activities.
Targets(IC50)	Proton pump
In vitro	Caloxin 2A1 selectively inhibits the Ca ²⁺ -Mg ²⁺ -ATPase activity in human erythrocyte leaky ghosts while maintaining no impact on the basal Mg ²⁺ -ATPase or Na ⁺ -K ⁺ -ATPase activity in the same cells, or on the Ca ²⁺ -Mg ²⁺ -ATPase activity in skeletal muscle sarcoplasmic reticulum. Additionally, it hampers the Ca ²⁺ -dependent synthesis of the 140-kDa acid-stable acylphosphate and promotes apoptosis in airway smooth muscle cells (ASMCs).

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.6763 mL	3.3817 mL	6.7634 mL
5 mM	0.1353 mL	0.6763 mL	1.3527 mL
10 mM	0.0676 mL	0.3382 mL	0.6763 mL
50 mM	0.0135 mL	0.0676 mL	0.1353 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

J Chaudhary, et al. Caloxin: a novel plasma membrane Ca²⁺ pump inhibitor. Am J Physiol Cell Physiol. 2001 Apr; 280(4):C1027-30.

Yi-fei Chen, et al. Plasma membrane Ca²⁺-ATPase regulates Ca²⁺ signaling and the proliferation of airway smooth muscle cells. Eur J Pharmacol. 2014 Oct 5;740:733-41.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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