

Caloxin 2A1 TFA

Chemical Properties

CAS No. :

Formula: C66H92F3N19O24

Molecular Weight: 1592.55

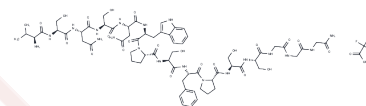
Storage:

Keep away from moisture, Store at low temperature,

Keep away from direct sunlight

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	Caloxin 2A1 TFA is a novel PM Ca ²⁺ pump inhibitor. It inhibits human red blood cell Ca ²⁺ -Mg ²⁺ -ATPase, blocking Ca ²⁺ dependent formation of a 140-kDa acid-stable acylphosphate.
Targets(IC50)	Proton pump, Calcium Channel
In vitro	Caloxin 2A1 TFA showed inhibition of Ca ²⁺ -Mg ²⁺ -ATPase in human erythrocytes but had no significant effect on basal Mg ²⁺ -ATPase and Na ²⁺ -K ⁺ -ATPase activity in ghost cells and in the sarcoplasmic reticulum of skeletal muscle. In addition, Caloxin 2A1 TFA blocked the Ca ²⁺ -dependent generation of 140-kDa acid-stabilized acyl phosphate. [1] Caloxin 2A1 TFA promoted the apoptotic process in airway smooth muscle cells (ASMC). [2]

Solubility Information

Solubility	H ₂ O: 80 mg/mL (50.23 mM), Sonication is recommended. DMSO: 80 mg/mL (50.23 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (2.07 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.6279 mL	3.1396 mL	6.2792 mL
5 mM	0.1256 mL	0.6279 mL	1.2558 mL
10 mM	0.0628 mL	0.314 mL	0.6279 mL
50 mM	0.0126 mL	0.0628 mL	0.1256 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

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

Chen YF, 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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