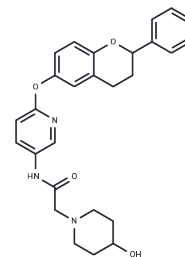


ORM-10962

Chemical Properties

CAS No. : 763926-98-3
 Formula: C₂₇H₂₉N₃O₄
 Molecular Weight: 459.54
 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	ORM-10962 is a potent and highly selective inhibitor of the sodium-calcium exchanger (NCX), with IC ₅₀ values of 67 nM for reverse mode inhibition and 55 nM for forward mode inhibition.
Targets(IC ₅₀)	Calcium Channel, Na ⁺ /Ca ²⁺ Exchanger

Solubility Information

Solubility	DMSO: 250 mg/mL (544.02 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 (7.18 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	2.1761 mL	10.8804 mL	21.7609 mL
5 mM	0.4352 mL	2.1761 mL	4.3522 mL
10 mM	0.2176 mL	1.088 mL	2.1761 mL
50 mM	0.0435 mL	0.2176 mL	0.4352 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

Kohajda Z, et al. The Effect of a Novel Highly Selective Inhibitor of the Sodium/Calcium Exchanger (NCX) on Cardiac Arrhythmias in In Vitro and In Vivo Experiments. PLoS One. 2016 Nov 10;11(11):e0166041.

Oravec K, et al. Inotropic effect of NCX inhibition depends on the relative activity of the reverse NCX assessed by a novel inhibitor ORM-10962 on canine ventricular myocytes. Eur J Pharmacol. 2018 Jan 5;818:278-286.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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