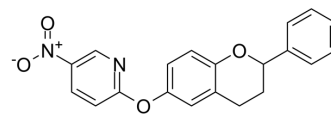


ORM-10103

Cat. No.:	HY-128678		
CAS No.:	488847-28-5		
Molecular Formula:	C ₂₀ H ₁₆ N ₂ O ₄		
Molecular Weight:	348.35		
Target:	Na ⁺ /Ca ²⁺ Exchanger		
Pathway:	Membrane Transporter/Ion Channel		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (717.67 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
	Preparing Stock Solutions	1 mM	2.8707 mL	14.3534 mL
	5 mM	0.5741 mL	2.8707 mL	
	10 mM	0.2871 mL	1.4353 mL	
	Please refer to the solubility information to select the appropriate solvent.			
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (5.97 mM); Clear solution			
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.97 mM); Clear solution			

BIOLOGICAL ACTIVITY

Description	ORM-10103 is a specific inhibitor of the Na ⁺ /Ca ²⁺ exchanger (NCX), which decreases the NCX current with estimated IC ₅₀ s of 55 and 67 nM at -80 and at 20 mV, respectively ^{[1][2]} .
IC ₅₀ & Target	IC ₅₀ : 55 (NCX -80 mV), 67 nM (NCX 20 mV) ^[2]

REFERENCES

[1]. Jost N, et al. ORM-10103, a novel specific inhibitor of the Na⁺/Ca²⁺ exchanger, decreases early and delayed afterdepolarizations in the canine heart. Br J Pharmacol. 2013 Oct;170(4):768-78.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA