Eniporide hydrochloride

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Cat. No.:	HY-106150B	H H2N, N, O
CAS No.:	211813-86-4	
Molecular Formula:	C ₁₄ H ₁₇ CIN ₄ O ₃ S	NH
Molecular Weight:	356.83	s
Target:	Na+/H+ Exchanger (NHE)	Ő Ő N
Pathway:	Membrane Transporter/Ion Channel	$\langle \rangle$
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)	H-CI

SOLVENT & SOLUBILITY

In Vitro	DMSO : 55 mg/mL (154.14 mM; Need ultrasonic) H ₂ O : 4.17 mg/mL (11.69 mM; ultrasonic and warming and heat to 60°C)					
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	
		1 mM	2.8025 mL	14.0123 mL	28.0245 mL	
		5 mM	0.5605 mL	2.8025 mL	5.6049 mL	
		10 mM	0.2802 mL	1.4012 mL	2.8025 mL	
	Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: PBS Solubility: 3.33 mg/mL (9.33 mM); Clear solution; Need ultrasonic and warming and heat to 60°C					
	2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.75 mg/mL (7.71 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.75 mg/mL (7.71 mM); Clear solution					
	4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.75 mg/mL (7.71 mM); Clear solution					

BIOLOGICAL ACTIVITY				
Description	Eniporide hydrochloride (EMD-96785 hydrochloride) is a potent Na ⁺ /H ⁺ exchange inhibitor.			
IC ₅₀ & Target	Sodium Channel ^[1]			
In Vitro	There is no significant effects of the Na ⁺ /H ⁺ exchange inhibitor eniporide on cardiac performance and high energy phosphate content in healthy pig hearts subjected to ischemia/reperfusion induced by crystalloid cardioplegic arrest ^[1] .			

Product Data Sheet

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

In stage 1, the administration of 100 mg and 150 mg eniporide results in smaller infarct sizes, especially in the angioplasty group. In contrast, in stage 2 there is no difference in the enzymatic infarct size between the three groups. Overall there is no effect of eniporide on clinical outcome (death, cardiogenic shock, heart failure, life-threatening arrhythmias). However, there is a significant reduction of the incidence of heart failure in patients reperfused late (>4 h)^[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

• Sci Rep. 2020 Apr 2;10(1):5800.

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REFERENCES

[1]. Klass O, et al. Effect of the Na+/H+ exchange inhibitor eniporide on cardiac performance and myocardial high energy phosphates in pigs subjected to cardioplegic arrest. Ann Thorac Surg. 2004 Feb;77(2):658-63.

[2]. Zeymer U, et al. The Na(+)/H(+) exchange inhibitor eniporide as an adjunct to early reperfusion therapy for acute myocardial infarction. Results of the evaluation of the safety and cardioprotective effects of eniporide in acute myocardial infarction (ESCAMI) trial. J Am Coll Cardiol. 2001 Nov 15;38(6):1644-50.

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