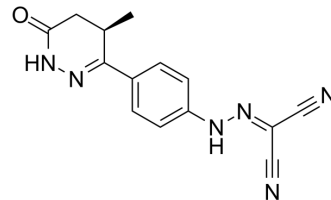


Levosimendan

Cat. No.:	HY-14286												
CAS No.:	141505-33-1												
Molecular Formula:	C ₁₄ H ₁₂ N ₆ O												
Molecular Weight:	280.28												
Target:	Autophagy; Potassium Channel; Phosphodiesterase (PDE)												
Pathway:	Autophagy; Membrane Transporter/Ion Channel; Metabolic Enzyme/Protease												
Storage:	<table border="0"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>2 years</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 year</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	2 years		-20°C	1 year
Powder	-20°C	3 years											
	4°C	2 years											
In solvent	-80°C	2 years											
	-20°C	1 year											



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 50 mg/mL (178.39 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1 mg	5 mg	10 mg
	1 mM		3.5679 mL	17.8393 mL	35.6786 mL
	5 mM		0.7136 mL	3.5679 mL	7.1357 mL
	10 mM		0.3568 mL	1.7839 mL	3.5679 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.5 mg/mL (8.92 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (8.92 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Levosimendan (Simsndan; OR-1259) is a calcium sensitiser used in the management of acutely decompensated congestive heart failure.

In Vitro

Levosimendan (OR1259) is a calcium sensitiser used in the management of acutely decompensated congestive heart failure. Levosimendan (OR1259) is an inodilator indicated for the short-term treatment of acutely decompensated severe chronic heart failure, and in situations where conventional therapy is not considered adequate. Levosimendan (OR1259) has shown preliminary positive effects in a range of conditions requiring inotropic support, including right ventricular failure, cardiogenic shock, septic shock, and Takotsubo cardiomyopathy^[1]. The cardiovascular effects of Levosimendan (OR1259) are exerted via more than an isolated drug-receptor interaction, and involve favorable energetic and neurohormonal

changes that are unique in comparison to other types of inodilators^[2]. Levosimendan (OR1259) might reduce mortality in cardiac surgery and cardiology settings of adult patients^[3].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Pharmaceuticals. 2023 May 30, 16(6), 815.
- PLoS Comput Biol. 2019 Jun 17;15(6):e1006619.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Nieminen, M.S., et al., Levosimendan: current data, clinical use and future development. Heart Lung Vessel, 2013. 5(4): p. 227-245.
- [2]. Papp, Z., et al., Levosimendan: molecular mechanisms and clinical implications: consensus of experts on the mechanisms of action of levosimendan. Int J Cardiol, 2012. 159(2): p. 82-7.
- [3]. Landoni, G., et al., Effects of levosimendan on mortality and hospitalization. A meta-analysis of randomized controlled studies. Crit Care Med, 2012. 40(2): p. 634-46.

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