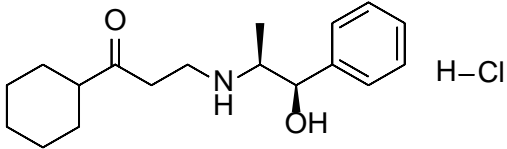


Product data sheet



MedKoo Cat#: 573105 Name: Alifedrine HCl CAS: 72913-80-5 (HCl) Chemical Formula: C ₁₈ H ₂₈ ClNO ₂ Exact Mass: 289.2042 Molecular Weight: 325.877	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

Alifedrine, also known as D13625, is a positive inotropic agent. Alifedrine moderately reduces the severity of ischaemia and reperfusion-induced ventricular arrhythmias. Alifedrine has an unusual and useful spectrum of pharmacological activity in that it combines antiarrhythmic activity with an ability to improve cardiac function. Alifedrine in the tested model markedly improved left ventricular function by balanced stimulation of the myocardium and reduction of pre- and afterload.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
TBD	TBD	TBD

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.07 mL	15.34 mL	30.69 mL
5 mM	0.61 mL	3.07 mL	6.14 mL
10 mM	0.31 mL	1.53 mL	3.07 mL
50 mM	0.07 mL	0.31 mL	0.61 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

TBD

In vivo study

1. Metzener P, Dedecke R, Göbel H, Martorana PA, Stroman F, Szelenyi I. Effects of the novel beta-adrenergic partial agonist alifedrine on cardiac performance in dogs with acute ischemic left ventricular failure. *J Cardiovasc Pharmacol.* 1989 Jul;14(1):103-8. doi: 10.1097/00005344-198907000-00018. PMID: 2475700.

2. Wainwright CL, Parratt JR. Alifedrine, a positive inotropic agent that moderately reduces the severity of ischaemia and reperfusion-induced ventricular arrhythmias. *Eur J Pharmacol.* 1988 Mar 15;147(3):373-80. doi: 10.1016/0014-2999(88)90171-9. PMID: 3378563.

7. Bioactivity

Biological target:

Alifedrine, also known as D13625, is a positive inotropic agent.

Product data sheet



In vitro activity

TBD

In vivo activity

Acute ischemic left ventricular failure was induced in dogs by coronary embolization with plastic microspheres, resulting in reduced cardiac output (CO), increased left ventricular end-diastolic pressure (LVEDP), pulmonary capillary pressure (PCP), and total peripheral resistance (TPR). Intravenous (i.v.) administration of alifedrine, a beta-adrenergic partial agonist (0.3 mg/kg as bolus and 0.3 mg/kg/h as infusion), significantly improved performance of the failing heart. Thus, alifedrine in this model markedly improved left ventricular function by balanced stimulation of the myocardium and reduction of pre- and afterload.

Reference: J Cardiovasc Pharmacol. 1989 Jul;14(1):103-8. <https://pubmed.ncbi.nlm.nih.gov/2475700/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.