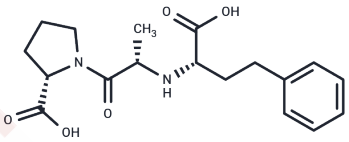
Data Sheet (Cat.No.T6340L)

TargetMol

Enalaprilat

Chemical Properties



CAS No. :	76420-72-9
Formula:	C18H24N2O5
Molecular Weight:	348.39
Storage:	Keep away from moisture 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	Enalaprilat (Enalapril acid) is a potent angiotensin-converting enzyme (ACE) inhibitor that enhances arterial and cardiopulmonary pressure reflex control of sympathetic activity in patients with heart failure, and can be used in the study of cardiovascular disease.
Targets(IC50)	RAAS,Angiotensin-converting Enzyme (ACE)
In vitro	Enalaprilat, the active metabolite of the orally administered drug enalapril, exhibits potent, competitive and long-lasting angiotensin-converting enzyme (ACE) inhibition with an IC50 of 1.94 nM.[1] Enalaprilat (1 nM-10 μM; 24 hours) inhibited IGF-I-induced proliferation of neonatal rat cardiac fibroblasts by 30% in a concentration-dependent manner with an IC50 of 90 nM. [2]
In vivo	Enalaprilat (0.01%-2.9% ophthalmic concentration) showed significant IOP-lowering effect in rabbit IOP assay. [3]

Solubility Information

Solubility	DMSO: 80 mg/mL (229.63 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8703 mL	14.3517 mL	28.7035 mL
5 mM	0.5741 mL	2.8703 mL	5.7407 mL
10 mM	0.287 mL	1.4352 mL	2.8703 mL
50 mM	0.0574 mL	0.287 mL	0.5741 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

Ceconi C, et al. Angiotensin-converting enzyme (ACE) inhibitors have different selectivity for bradykinin binding sites of human somatic ACE. Eur J Pharmacol. 2007 Dec 22;577(1-3):1-6.
van Eickels M, et al. Angiotensin-converting enzyme (ACE) inhibition attenuates insulin-like growth factor-I (IGF-I) induced cardiac fibroblast proliferation. Br J Pharmacol. 2000 Dec;131(8):1592-6.
Loftsson T, et al. Enalaprilat and enalapril maleate eyedrops lower intraocular pressure in rabbits. Acta Ophthalmol. 2010 May;88(3):337-41.
Burckhardt BB, et al. Simultaneous quantitative and qualitative analysis of aliskiren, enalapril and its active metabolite enalaprilat in undiluted human urine utilizing LC-ESI-MS/MS. Biomed Chromatogr. 2014 Dec;28(12):1679-91.