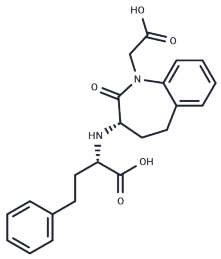
Data Sheet (Cat.No.T19722)

TargetMol

Benazeprilat

Chemical Properties



CAS No. : 86541-78-8

Formula: C22H24N2O5

Molecular Weight: 396.44

Storage: Store at low temperature
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	Benazeprilat(CGS 14831) is an orally active active metabolite of Benazepril.Benazeprilat has potent antihypertensive activity and can be used in combination with other classes of compounds, including thiazide diuretics and calcium channel blockers, to reduce the incidence of diseases associated with cardiovascular risk and secondary end-organ damage.Benazeprilat may be be used to study acute left ventricular failure.
Targets(IC50)	RAAS,Endogenous Metabolite,Angiotensin-converting Enzyme (ACE),Drug Metabolite
In vivo	Benazeprilat (10 mg/kg; intravenous injection; once a day for 2 days; Male SHR) and amlodipine (0.5 mg/kg, intravenous injection) in combination produce a great hypotensive effect.[2] Benazepril (0.7 mg/kg; oral) significantly alters the dynamics of systemic RAAS peptides, leading to a considerable reduction in AII and ALD, while concurrently elevating PRA and AI.[3]

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble) DMSO: 1 mg/mL (2.52 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5224 mL	12.6122 mL	25.2245 mL
5 mM	0.5045 mL	2.5224 mL	5.0449 mL
10 mM	0.2522 mL	1.2612 mL	2.5224 mL
50 mM	0.0504 mL	0.2522 mL	0.5045 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

Barrios V, et al. Antihypertensive and organ-protective effects of benazepril. Expert Rev Cardiovasc Ther. 2010 Dec; 8(12):1653-71.
Bazil MK, et al. Hemodynamic effects of amlodipine and benazeprilat in spontaneously hypertensive rats. J Cardiovasc Pharmacol. 1993 Mar;21(3):405-11.
Mochel JP, et al. Capturing the dynamics of systemic Renin-Angiotensin-Aldosterone System (RAAS) peptides heightens the understanding of the effect of benazepril in dogs. J Vet Pharmacol Ther. 2013 Apr;36(2):174-80.
Toutain PL, et al. Benazeprilat disposition and effect in dogs revisited with a pharmacokinetic/pharmacodynamic modeling approach. J Pharmacol Exp Ther. 2000 Mar;292(3):1087-93.