Benazeprilat

Cat. No.: HY-118472

CAS No.: 86541-78-8

Molecular Formula: $C_{22}H_{24}N_2O_5$

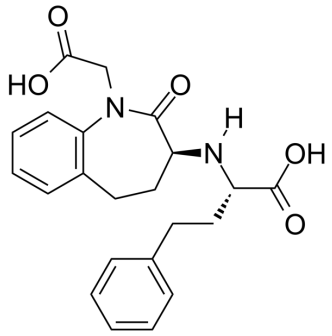
Molecular Weight: 396.44

Target: Endogenous Metabolite; Angiotensin-converting Enzyme (ACE); Drug Metabolite

Pathway: Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
In solvent	-80°C	6 months
	-20°C	1 month



BIOLOGICAL ACTIVITY

Description

Benazeprilat is an orally active and the active metabolite of benazepril, a carboxyl-containing ACE inhibitor with antihypertensive activity. Benazepril is a well-established antihypertensive agent, both in monoresearch and in combination with other classes of drugs including thiazide diuretics and calcium channel blockers. Benazepril is a first-line research in reducing various pathologies associated with CV risk and secondary end-organ damage[1][2][3].

In Vivo

Benazeprilat (10 mg/kg, intravenous injection) and amlodipine (0.5 mg/kg, intravenous injection) in combination produce great hypotensive effect[2].

Benazepril (0.7 mg/kg, oral) markedly influences the dynamics of systemic RAAS peptides, resulting in a substantial decrease in AII and ALD while increasing PRA and AI[3].

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

Animal Model:	Male SHR (14-16 weeks of age, 250-350 g)[2].
Dosage:	10 mg/kg
Administration:	I.V; once a day for 2 days.
Result:	Produced hypotensive effect.

Animal Model:	Beagle dogs (12.0-19.5 kg)[3].
Dosage:	0.7 mg/kg
Administration:	P.O, once a day for 5 days.
Result:	Effected systemic RAAS peptides.

REFERENCES

[1]. Barrios V, Antihypertensive and organ-protective effects of benazepril. Expert Rev Cardiovasc Ther. 2010 Dec;8(12):1653-71.

[2]. Bazil MK, Hemodynamic effects of amlodipine and benazeprilat in spontaneously hypertensive rats. J Cardiovasc Pharmacol. 1993 Mar;21(3):405-11.

[3]. Mochel JP, 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.

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