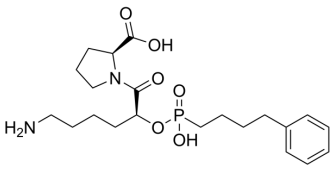
Ceronapril

Cat. No.:	HY-106816
CAS No.:	111223-26-8
Molecular Formula:	$C_{21}H_{33}N_2O_6P$
Molecular Weight:	440.47
Target:	Angiotensin-converting Enzyme (ACE)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Ceronapril (SQ 29852) is a potent and orally active angiotensin converting enzyme (ACE) inhibitor with an IC_{50} of 36 nM[1].
IC_{50} & Target	IC50: 36 nM (ACE)[1]
In Vivo	Ceronapril (SQ 29852) inhibits ACE in male SD rats with ED_{50}s of 0.063 μM/kg and 0.53 μM/kg by IV and PO, respectively[1]. Ceronapril (100 mg/kg; p.o.; single dose or twice daily for 3 days) blocks ACE in peripheral sites in rats[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Sprague-Dawley rats[2]
Dosage:	100 mg/kg
Administration:	PO, twice daily for 3 days or single daily dose
Result:	Showed clear inhibition of ACE in the 2 circumventricular organs-the subfornical organ and the lamina terminals-but no change in other regions of the brain after chronic treatment. Inhibited ACE in plasma, kidney and lung rapidly (3 hr) after a single administration. Did not inhibit ACE in structures of the brain within the blood-brain barrier, such as the caudate-putamen, choroid plexus, globus pallidus, supraoptic nucleus and paraventricular nucleus of the hypothalamus.

REFERENCES

[1]. Karanewsky D S, et al. (Phosphinyloxy) acyl amino acid inhibitors of angiotensin converting enzyme (ACE). 1. Discovery of (S)-1-[6-amino-2-[[hydroxy (4-phenylbutyl) phosphinyl] oxy]-1-oxohexyl]-L-proline, a novel orally active inhibitor of ACE. Journal of medicinal chemistry, 1988, 31(1): 204-212.

[2]. Chen BZ, et al. Effect of acute and chronic administration of ceronapril on angiotensin converting enzyme in plasma, kidney, lung, brain regions and cerebrospinal fluid of rats. Neuropharmacology. 1992 Sep;31(9):929-35.

Caution: Product has not been fully validated for medical applications. For research use only.

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