Product Datasheet

Moexipril

Catalog No. **BP-00023** · CAS **103775-10-6** · Form **free base** · Physical state **solid** · Version **1.0** · Revision **2026-09-14**

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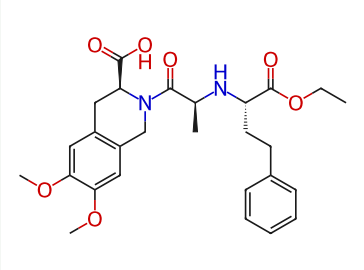
Target	Research area
Angiotensin-converting Enzyme (ACE); Apoptosis	**Cardiovascular Disease; Neurological Disease**

Molecular formula	$C_{27}H_{34}N_2O_7$
Molecular weight	**498.5681**

STRUCTURE



DESCRIPTION

Moexipril is an orally active inhibitor of angiotensin-converting enzyme (ACE), and becomes effective by being hydrolyzed to moexiprila (hydrochloride). Moexipril exhibits antihypertensive and neuroprotective effects-.

BIOLOGICAL ACTIVITY

In Vitro

Moexipril is devoid of anti-inflammatory properties and has no effect on platelet function.

Moexipril hydrolyzes to Moexiprilat, and Moexiprilat inhibits ACE in guinea pig serum as well as on purified ACE from rabbit lung with IC50s of 2.6 nM and 4.9 nM, respectively.

Moexipril (0.01 nM-0.1 mM) exhibits high potency against both ACE in rats plasma and purified ACE from rabbit lung, with IC50s of 1.75 nM and 2.1 nM, respectively.

Moexipril (0-100 μM, 24 h) significantly reduced the percentage of damaged neurons in a dose-dependent manner.

Moexipril (0-100 μM, 24 h) significantly attenuates Fe2+/3+-induced neurotoxicity.

Moexipril dose not cause significant changes in the percentage of apoptotic neurons.

In Vivo

Moexipril can not cross the blood-brain barrier.

Moexipril (3 mg/kg, 30 mg/kg and 10 mg/kg; p.o.; once daily; 5 days) exhibits a dose-dependent and antihypertensive effects in renal hypertensive rats, spontaneously hypertensive rats and perinephritic hypertensive dogs, respectively.

Moexipril (0.3 mg/kg, i.p.) significantly reduces the infarct area on the mouse brain surface in NMRI mice.

Moexipril (0.1 mg/kg, i.p.) significantly attenuates the cortical infarct volume in Long-Evans rats.

REFERENCES

[1]. Chrysant, S.G. and G.S. Chrysant, Pharmacological and clinical profile of moexipril: a concise review. J Clin Pharmacol, 2004. 44(8): p. 827-36.

[2]. Friehe H, et al. Pharmacological and toxicological studies of the new angiotensin converting enzyme inhibitor moexipril hydrochloride. Arzneimittelforschung. 1997 Feb. 47(2):132-44.

[3]. Edling O, et al. Moexipril, a new angiotensin-converting enzyme (ACE) inhibitor: pharmacological characterization and comparison with enalapril. J Pharmacol Exp Ther. 1995 Nov;275(2):854-63.

[4]. Ravati A, et al. Enalapril and moexipril protect from free radical-induced neuronal damage in vitro and reduce ischemic brain injury in mice and rats. Eur J Pharmacol. 1999 May 28;373(1):21-33.