Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Ramipril

Catalog No: tcsc2270

Available Sizes

Size: 100mg

Size: 500mg

Specifications

CAS No:
87333-19-5

Formula:
$C_{23}H_{32}N_2O_5$

Pathway:
Metabolic Enzyme/Protease

Target:
Angiotensin-converting Enzyme (ACE)

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
HOE-498

Observed Molecular Weight:
416.51

Product Description

Ramipril is an angiotensin-converting enzyme (ACE) inhibitor with IC50 of 5 nM.

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Target: ACE

Ramipril is an angiotensin-converting enzyme (ACE) inhibitor with IC50 of 5 nM [1]. Ramipril enhances the activity of ACE-associated CK2 and the phosphorylation of ACE Ser1270 in cultured endothelial cells, but is unable to activate JNK or stimulate the nuclear accumulation of c-Jun in endothelial cells expressing a S1270A ACE mutant or in ACE-deficient cells. Prolonged Ramipril treatment increases ACE expression in primary cultures of human endothelial cells and in vivo (mouse lung), which can be prevented by pretreatment with the JNK inhibitor SP600125 [2].

Chronic in vivo administration of Ramipril to rats at a dosage that has similar hypotensive effects in vitro HUVECs significantly reduces the rate of LPS-induced apoptosis compared to the other ACE inhibitors, which contrasts with the apoptosis effect in vitro [3]. Ramipril inhibits systolic blood pressure (SBP) with IC50 of 1.97 mg/kg in spontaneously hypertensive rats (SHR). When in combination with AT1-receptor blockade by candesartan-cilexetil increases SBP reduction synergistically rather than additively [4].