Web: www.taiclone.com
Tel: +886-2-2735-9682
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Angiotensin II human

Catalog No: tcsc2280

Available Sizes

Size: 10mg

Size: 50mg

Specifications

CAS No:
4474-91-3

Formula:
$C_{50}H_{71}N_{13}O_{12}$

Pathway:
GPCR/G Protein

Target:
Angiotensin Receptor

Purity / Grade:
>98%

Solubility:
H2O : ≥ 50 mg/mL (47.79 mM); DMSO : 16.67 mg/mL (15.93 mM; Need ultrasonic)

Alternative Names:
Angiotensin II;Hypertensin II;Ang II;DRVYIHPF

Observed Molecular Weight:
1046.18

Product Description

Angiotensin II human is a vasoconstrictor that acts on the **AT1** and the **AT2** receptor.

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IC50 & Target: Angiotensin receptor (AT receptor)[1]

In Vitro: Most of the known actions of Angiotensin II (Ang II) are mediated by AT_1 receptors, the AT_2 receptor contributes to the regulation of blood pressure and renal function[1]. Angiotensin II raises blood pressure (BP) by a number of actions, the most important ones being vasoconstriction, sympathetic nervous stimulation, increased aldosterone biosynthesis and renal actions. Other Angiotensin II actions include induction of growth, cell migration, and mitosis of vascular smooth muscle cells, increased synthesis of collagen type I and III in fibroblasts, leading to thickening of the vascular wall and myocardium, and fibrosis. These actions are mediated by type 1 Ang II receptors (AT_1)[2]. At the cellular level, responsiveness to Angiotensin II is conferred by the expression of the two classes of angiotensin receptors (AT_1 and AT_2). The effects of Angiotensin II to increase blood pressure are mediated by AT1 receptors[3].

In Vivo: To distinguish the AT_1 receptor population that is critical for the pathogenesis of hypertension, osmotic minipumps are implanted s.c. into each animal to infuse Angiotensin II (1,000 ng/kg/min) continuously for 4 weeks. Angiotensin II causes hypertension by activating AT_1 receptors in the kidney promoting sodium reabsorption[3].