

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

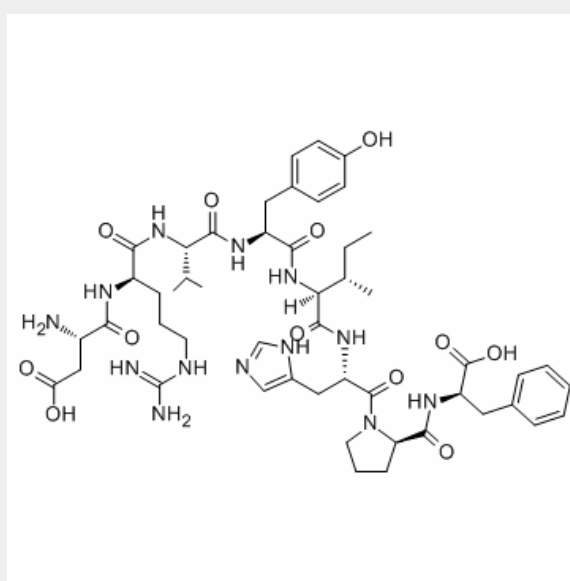
Product Description

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

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

In Vitro: Most of the known actions of Angiotensin II (Ang II) are mediated by AT₁ receptors, the AT₂ 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 (AT₁)^[2]. At the cellular level, responsiveness to Angiotensin II is conferred by the expression of the two classes of angiotensin receptors (AT₁ and AT₂). The effects of Angiotensin II to increase blood pressure are mediated by AT₁ receptors^[3].

In Vivo: To distinguish the AT₁ 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 AT₁ receptors in the kidney promoting sodium reabsorption^[3].



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