
Product Data Sheet

Product Name: Angiotensin II (3-8), human

Cat. No.: GC35352

Chemical Properties

Cas. No. 12676-15-2

Formula C₄₀H₅₄N₈O₈ M.Wt 774.91

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

Background

Angiotensin II (3-8) is an endogenous C-terminal fragment of the peptide vasoconstrictor angiotensin II.¹ It selectively binds to the angiotensin 2 (AT₂) over AT₁ receptors (IC₅₀s = 48.6 and >1,000 nM, respectively, in HEK293 cells expressing rat receptors). It also binds to AT₄ receptors in bovine aortic endothelial cell membranes (IC₅₀ = 1.6 nM).² Angiotensin II (3-8) induces a positive chronotropic effect in isolated rat right atria (EC₅₀ = 4.68 μM) and increases mean arterial pressure (MAP) *in vivo* in rats when administered intracerebroventricularly at a dose of 1 pmol.^{3,4} It also increases latency to withdrawal in a tail-flick test in rats when administered by microinjection into the ventrolateral periaqueductal gray (vlPAG).⁵

1. Bosnyak, S., Jones, E.S., Christopoulos, A., et al. Relative affinity of angiotensin peptides and novel ligands at AT₁ and AT₂ receptors. *Clin. Sci. (Lond.)* 121(7):297-303(2011) 2. Bernier, S.G., Bellemare, J.M., Escher, E., et al. Characterization of AT₄ receptor from bovine aortic endothelium with photosensitive analogues of angiotensin IV. *Biochemistry* 37(12):4280-4287(1998) 3. Li, Q., Zhang, J., Pfaffendorf, M., et al. Direct positive chronotropic effects of angiotensin II and angiotensin III in pithed rats and in rat isolated atria. *Br. J. Pharmacol.* 118(7):1653-1658(1996) 4. Wright, J.W., Jensen, L.L.,

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

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Roberts, K.A., et al. Structure-function analyses of brain angiotensin control of pressor action in rats *Am. J. Physiol.* 257(6 Pt. 2)R1551-R1557(1989) 5. Guethe, L.M., Pelegrini-da-Silva, A., Borelli, K.G., et al. Angiotensin (5-8) modulates nociception at the rat periaqueductal gray via the NO-sGC pathway and an endogenous opioid *Neuroscience* 231315-327(2013)

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