
Product Data Sheet

Product Name: Angiotensin III, human, mouse TFA

Cat. No.: GC66025

Chemical Properties

Cas. No.

Formula C₄₈H₆₇F₃N₁₂O₁₁

M.Wt

1045.11

Solubility

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 III (Ang III) is a heptapeptide agonist at the angiotensin 1 (AT₁) and AT₂ receptors, with a 30-fold higher affinity for AT₂ compared with AT₁ in HEK293 cells.^{1,2} Ang III is the preferred agonist for renal AT₂ receptors, which are responsible for sodium excretion into the urine.³ Ang III induces the same level of aldosterone synthesis as Ang II but has lower vasoconstrictive activity *in vivo*.⁴ In the brain renin-angiotensin system, Ang III increases sympathetic nerve activity and vasopressin release and dampens the baroreflex leading to higher blood pressure.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. Wright, J.W., and Harding, J.W. Brain renin-angiotensin--a new look at an old system Prog. Neurobiol. 95(1)49-67(2011) 3. Kemp, B.A., Bell, J.F., Rottkamp, D.M., et al. Intrarenal angiotensin III is the predominant agonist for proximal tubule angiotensin type 2 receptors Hypertension 60(2)387-395(2012) 4. Blair-West, J.R., Coghlan, J.P., Denton, D.A., et al. A dose-response comparison of the actions of angiotensin II and angiotensin III in sheep J. Endocrinol. 87(3)409-417(1980) 5. Gao, J., Marc, Y., Iturrioz, X., et al. A new strategy for treating hypertension by blocking the activity of the brain renin-

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

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angiotensin system with aminopeptidase A inhibitors Clin. Sci. (Lond.)127(3)135-148(2014)

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