

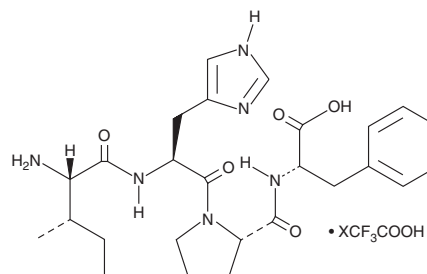
PRODUCT INFORMATION



Angiotensin II (5-8) (human, rat, mouse) (trifluoroacetate salt)

Item No. 24739

Formal Name: L-isoleucyl-L-histidyl-L-prolyl-L-phenylalanine, 2,2,2-trifluoroacetate
Synonym: Angiotensin (5-8)
MF: C₂₆H₃₆N₆O₅ • XCF₃COOH
FW: 512.6
Purity: ≥95%
Supplied as: A lyophilized powder
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Angiotensin II (5-8) (human, rat, mouse) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the angiotensin II (5-8) (human, rat, mouse) (trifluoroacetate salt) in water. The solubility of angiotensin II (5-8) (human, rat, mouse) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Angiotensin II (5-8) is an endogenous C-terminal fragment of the peptide vasoconstrictor angiotensin II (Item No. 17150).¹ It inhibits renin (Item No. 10006217) release from rat kidney slices at a concentration of 50 μM and relaxes rat aorta pre-contracted with phenylephrine (Item Nos. 17205 | 18619; EC₅₀ = 0.28 μM).^{1,2} *In vivo*, microinjection of angiotensin II (5-8) into the ventrolateral periaqueductal gray (vPAG) of rats increases mean arterial pressure (MAP) and decreases heart rate (HR) by approximately 2.7- and 3-fold less, respectively, than angiotensin II.¹ It increases the latency to withdrawal in a tail-flick test and the mechanical withdrawal threshold in an incision allodynia test in rats when administered at a dose of 0.2 nmol into the vPAG. Angiotensin II (5-8) (0.4 nmol, vPAG microinjection) reduces the number of entries and time spent in the open arms of the elevated plus maze and increases the mean startle amplitude, a measure of conditioned fear, in response to foot shock.³

References

1. 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* **231**, 315-327 (2013).
2. Naftilan, A.J. and Oparil, S. Inhibition of renin release from rat kidney slices by the angiotensins. *Am. J. Physiol.* **235**(1), F62-F68 (1978).
3. Genaro, K., Juilano, M.A., Prado, W.A., *et al.* Effects of angiotensin (5-8) microinfusions into the ventrolateral periaqueductal gray on defensive behaviors in rats. *Behav. Brain Res.* **256**, 537-544 (2013).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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