PRODUCT INFORMATION

Angiotensin II (5-8) (human, rat, mouse)
Item No. 24739

CAS Registry No.: 34233-50-6
Formal Name: L-isoleucyl-L-histidyl-L-prolyl-L-phenylalanine
Synonym: Angiotensin (5-8)
MF: C_{26}H_{36}N_{6}O_{5}
FW: 512.6
Purity: ≥95%
Supplied as: A lyophilized powder
Storage: -20°C
Stability: ≥2 years

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

Laboatory Procedures

Angiotensin II (5-8) (human, rat, mouse) is supplied as a lyophilized powder. A stock solution may be made by dissolving the angiotensin II (5-8) (human, rat, mouse) in water. The solubility of angiotensin II (5-8) (human, rat, mouse) 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; EC_{50} = 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.\(^2\) It increases the latency to withdrawal in a tail-flick test and the mechanical withdrawal threshold in an incision alldynia 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