

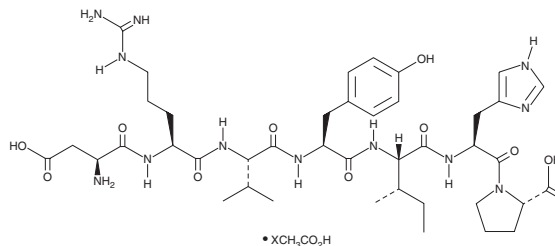
PRODUCT INFORMATION



Angiotensin Fragment 1-7 (acetate)

Item No. 17594

Formal Name: 5-L-isoleucine-1-7-angiotensin II
MF: C₄₁H₆₂N₁₂O₁₁ • XC₂H₄O₂
FW: 899.0
Purity: ≥95%
Supplied as: A crystalline solid
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 fragment 1-7 (acetate) is supplied as a crystalline solid. Aqueous solutions of angiotensin fragment 1-7 (acetate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of angiotensin fragment 1-7 (acetate) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

In the renin-angiotensin system, angiotensin I is cleaved by angiotensin-converting enzyme (ACE) to form angiotensin II, which has effects on blood pressure, as well as fluid and electrolyte homeostasis. Angiotensin fragment 1-7 is an angiotensin metabolite that functions as a type 1 angiotensin II receptor agonist whereupon it can control hydroelectrolyte balance and demonstrates vasodilatory and anti-inflammatory actions in opposition to various adverse effects of angiotensin II (Item No. 17150).¹ This peptide can be generated by the action of ACE2, a homolog of ACE, on angiotensin II or by the action of neprilysin on angiotensin I.² It has been studied in the context of ameliorating the symptoms of metabolic syndrome.^{3,4}

References

1. Simões-e-Silva, A.C., Baracho, N.C.V., Passaglio, K.T., *et al.* Renal actions of angiotensin-(1-7). *Braz. J. Med. Biol. Res.* **30(4)**, 503-513 (1997).
2. Rice, G.I., Thomas, D.A., Grant, P.J., *et al.* Evaluation of angiotensin-converting enzyme (ACE), its homologue ACE2 and neprilysin in angiotensin peptide metabolism. *Biochem. J.* **383(1)**, 45-51 (2004).
3. Purushothaman, K.-R., Krishnan, P., Purushothaman, M., *et al.* Expression of angiotensin-converting enzyme 2 and its end product angiotensin 1-7 is increased in diabetic atheroma: Implications for inflammation and neovascularization. *Cardiovasc. Pathol.* **22**, 42-48 (2013).
4. Marcus, Y., Shefer, G., Sasson, K., *et al.* Angiotensin 1-7 as means to prevent the metabolic syndrome: Lessons from the fructose-fed model. *Diabetes* **62**, 1121-1130 (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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