

# PRODUCT INFORMATION



## Angiotensinogen (1-14) (human) (trifluoroacetate salt)

Item No. 24989

**Formal Name:** L- $\alpha$ -aspartyl-L-arginyl-L-valyl-L-tyrosyl-L-  
isoleucyl-L-histidyl-L-prolyl-L-phenylalanyl-  
L-histidyl-L-leucyl-L-valyl-L-isoleucyl-L-  
histidyl-L-asparagine, trifluoroacetate salt

**MF:**  $C_{83}H_{122}N_{24}O_{19} \cdot XCF_3COOH$

**FW:** 1,760.0

**Purity:**  $\geq 95\%$

**Supplied as:** A lyophilized powder

**Storage:**  $-20^{\circ}C$

**Stability:**  $\geq 4$  years

H—Asp—Arg—Val—Tyr—Ile—His—Pro—Phe—His—Leu—  
Val—Ile—His—Asn—OH  
 $\cdot XCF_3COOH$

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

### Laboratory Procedures

Angiotensinogen (1-14) (human) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the angiotensinogen (1-14) (human) (trifluoroacetate salt) in the solvent of choice. Angiotensinogen (1-14) (human) (trifluoroacetate salt) is soluble in the organic solvent formic acid at a concentration of approximately 1 mg/ml.

### Description

Angiotensinogen (1-14), also known as tetradecapeptide (TDP), is a synthetic peptide precursor of angiotensin I (Item No. 24737) that corresponds to amino acids 1-14 of endogenous human angiotensinogen.<sup>1</sup> Angiotensinogen (1-14) is cleaved by renin at the Leu-Val peptide bond to release angiotensin I, which is then converted to angiotensin II (Item No. 17150) by angiotensin converting enzyme (ACE) and exerts vasoconstrictive properties.<sup>2</sup> Angiotensinogen (1-14) (0.001-1  $\mu$ M) induces contraction of isolated rat femoral resistance vessels, an effect that is reduced by the angiotensin II receptor partial antagonist saralasin and enhanced by the serine protease kallikrein.<sup>3</sup>

### References

1. Kageyama, R., Ohkubo, H., and Nakanishi, S. Primary structure of human preangiotensinogen deduced from the cloned cDNA sequence. *Biochemistry* **23(16)**, 3603-3609 (1984).
2. Tewksbury, D.A., Dart, R.A., and Travis, J. The amino terminal amino acid sequence of human angiotensinogen. *Biochem. Biophys. Res. Commun.* **99(4)**, 1311-1315 (1981).
3. Kvist, S., Mulvany, M.J., and Aalkjaer, C. Studies of the renin-angiotensin system in the wall of rat femoral resistance vessels. *Eur. J. Pharmacol.* **198(1)**, 77-83 (1991).

#### 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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