

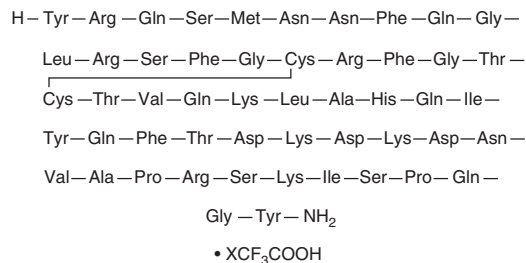
PRODUCT INFORMATION



Adrenomedullin (1-52) (human) (trifluoroacetate salt)

Item No. 24889

Formal Name: adrenomedullin (human), trifluoroacetate salt
Synonyms: ADM, AM
MF: C₂₆₄H₄₀₆N₈₀O₇₇S₃ • XCF₃COOH
FW: 6,028.8
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.

Laboratory Procedures

Adrenomedullin (1-52) (human) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the adrenomedullin (1-52) (human) (trifluoroacetate salt) in water. The solubility of adrenomedullin (1-52) (human) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Adrenomedullin (1-52) is a peptide with diverse biological activities.¹⁻⁴ It belongs to the calcitonin family of peptides, which includes amylin (Item Nos. 24274 | 24275), calcitonin gene-related peptide (Item Nos. 24405 | 24725 | 24728), and calcitonin (Item Nos. 24409 | 24410).¹ Adrenomedullin (1-52) is expressed in pheochromocytomas, adrenal medulla, heart, lung, and kidney as well as human umbilical vein endothelial cells (HUVECs) and in human glomerular epithelial and hematopoietic cell lines. *In vivo*, adrenomedullin (1-52) (10-3,000 ng per animal) reverses increases in lobar arterial pressure induced by U-46619 (Item No. 16450) in a dose-dependent manner in cats but has no effect on basal lobar arterial pressure or systemic arterial pressure.² It reduces mechanical ventilation-induced lung injury and sepsis as well as liver and gut injury induced by ventilator-induced lung injury in a mouse model of pneumococcal pneumonia infection.³ Adrenomedullin (1-52) improves survival and inhibits cardiac tissue damage induced by doxorubicin (Item No. 15007) in mice.⁴ Adrenomedullin (1-52) also reduces hyperoxia-induced right ventricular hypertrophy and artery thickness in a rat model of bronchopulmonary dysplasia.¹

References

1. García-Ponce, A., Chánez Paredes, S., Castro Ochoa, K.F., *et al.* Regulation of endothelial and epithelial barrier functions by peptide hormones of the adrenomedullin family. *Tissue Barriers* **4(4)**, e1228439 (2016).
2. Lippton, H., Chang, J.K., Hao, Q., *et al.* Adrenomedullin dilates the pulmonary vascular bed *in vivo*. *J. Appl. Physiol.* **76(5)**, 2154-2156 (1994).
3. Müller-Redetzky, H.C., Will, D., Hellwig, K., *et al.* Mechanical ventilation drives pneumococcal pneumonia into lung injury and sepsis in mice: Protection by adrenomedullin. *Crit. Care* **18(2)**, R73 (2014).
4. Yoshizawa, T., Takizawa, S., Shimada, S., *et al.* Effects of adrenomedullin on doxorubicin-induced cardiac damage in mice. *Biol. Pharm. Bull.* **39(5)**, 737-746 (2016).

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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