

PRODUCT INFORMATION



Argipressin (acetate)

Item No. 24154

CAS Registry No.: 129979-57-3
Formal Name: 8-L-arginine-vasopressin, acetate
Synonyms: AVP, Cys-Tyr-Phe-Gln-Asn-Cys-

Peptide Sequence: CYFQNCPRG-NH₂

MF: C₄₆H₆₅N₁₅O₁₂S₂ • XC₂H₄O₂
FW: 1,084.2

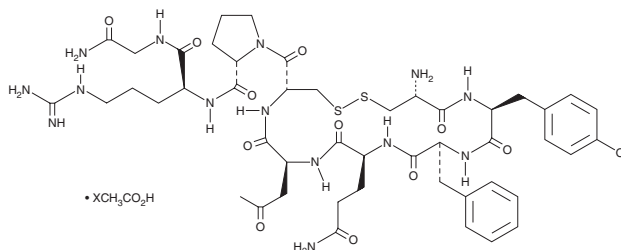
Purity: ≥95%

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

Argipressin (acetate) is supplied as a lyophilized powder. A stock solution may be made by dissolving the argipressin (acetate) in water. The solubility of argipressin (acetate) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Argipressin is a peptide hormone with vasoconstrictive and antidiuretic activities that binds to the vascular arginine vasopressin receptor, V₁, with K_d values of 1.31 and 1.44 nM in A_{7r5} rat aortic smooth muscle cells and neonatal rat cardiomyocytes, respectively.^{1,2} It also stimulates the intracellular release of calcium in A_{7r5} cells (EC₅₀ = 5 nM).³ In rat models, argipressin induces hypertension and tachycardia when injected into the lateral septal nuclei at a dose of 100-400 ng and increases heart rate and mean arterial pressure (MAP) when injected into the medial amygdaloid body at a dose of 150-600 ng.^{4,5}

References

1. Thibonnier, M., Bayer, A.L., Simonson, M.S., et al. Multiple signaling pathways of V₁-vascular vasopressin receptors of A_{7r5} cells. *Endocrinology* **129**(6), 2845-2856 (1991).
2. Xu, Y.J. and Gopalakrishnan, V. Vasopressin increases cytosolic free [Ca²⁺] in the neonatal rat cardiomyocyte. Evidence for V₁ subtype receptors. *Circ. Res.* **69**(1), 239-245 (1991).
3. Byron, K.L. Vasopressin stimulates Ca²⁺ spiking activity in A7r5 vascular smooth muscle cells via activation of phospholipase A₂. *Circ. Res.* **78**(5), 813-820 (1996).
4. Gao, L., Jiang, N.-C., Luo, Q.-H., et al. Cardiovascular effects of injection of argipressin into lateral septal nuclei in rats. *Zhongguo Yao Li Xue Bao.* **17**(1), 49-52 (1996).
5. Jiang, N.-C., Gao, L., Chen, C., et al. Effects of argipressin injected into medial amygdaloid body on blood pressure and heart rate in rats. *Zhongguo Yao Li Xue Bao.* **14**(2), 118-120 (1993).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 07/18/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM