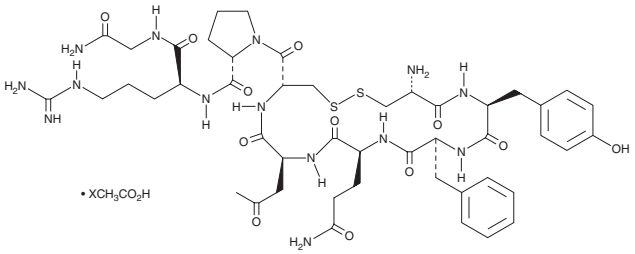
PRODUCT INFORMATION

Argipressin (acetate)

Item No. 24154

CAS Registry No.:	129979-57-3
Formal Name:	8-L-arginine-vasopressin, acetate
Synonyms:	AVP, [Arg^{8}]-Vasopressin
MF:	$C_{46}H_{65}N_{15}O_{12}S_2 \bullet XC_2H_4O_2$
FW:	1,084.2
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

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, V_1, with K_d values of 1.31 and 1.44 nM in A_7r_5 rat aortic smooth muscle cells and neonatal rat cardiomyocytes, respectively.[1,2] It also stimulates the intracellular release of calcium in A_7r_5 cells (EC_{50} = 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 V_1-vascular vasopressin receptors of A_7r_5 cells. *Endocrinology* **129(6)**, 2845-2856 (1991).
2. Xu, Y.J. and Gopalakrishnan, V. Vasopressin increases cytosolic free [Ca^{2+}] in the neonatal rat cardiomyocyte. Evidence for V_1 subtype receptors. *Circ. Res.* **69(1)**, 239-245 (1991).
3. Byron, K.L. Vasopressin stimulates Ca^{2+} spiking activity in A7r5 vascular smooth muscle cells via activation of phospholipase A_2. *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
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