

## Argipressin - Purified

**Catalog No.:** AR10225PU-N

**Quantity:** 25 mg

**Background:** Argipressin (Arginine vasopressin) is similar to a naturally occurring hormone also known as antidiuretic hormone (ADH) or vasopressin. ADH has two main effects in the body. Firstly, it acts on receptors in the kidney to retain water in the body, which helps to prevent excessive loss of water in the urine. Secondly, ADH causes narrowing of blood vessels (vasoconstriction), thereby limiting blood flow to a particular area of the body. Argipressin is derived from a prohormone precursor that is synthesized in the hypothalamus, from which it is liberated during transport to the posterior pituitary. Most of it is stored in the posterior part of the pituitary gland to be released into the blood stream; some of it is also released directly into the brain. The vasopressins are peptides consisting of nine amino acids (nonapeptides). The amino acid sequence of arginine vasopressin is Cys-Tyr-Phe-Gln-Asn-Cys-Pro-Arg-Gly, with the cysteine residues forming a sulfur bridge. The structure of oxytocin is very similar to that of the vasopressins: it is also a nonapeptide with a sulfur bridge and its amino acid sequence differs at only two positions

**Source:** Synthetic

**Format:** **State:** Sterile Filtered White lyophilized (freeze-dried) powder without additives

**Purity:** > 98.0% as determined by both RP-HPLC and SDS-PAGE analysis

**Reconstitution:** Restore in sterile 18MΩ-cm<sup>-1</sup> H<sub>2</sub>O not less than 100 °g/ml, which can then be further diluted to other aqueous solutions.

**Description:** Argipressin Synthetic is a single, non-glycosylated polypeptide chain containing 9 amino acids.

**Molecular formula:** C<sub>46</sub>H<sub>65</sub>N<sub>16</sub>O<sub>12</sub>S<sub>2</sub>

**AA Sequence:**

*Cys-Tyr-Phe-Gln-Asn-Cys-Pro-Arg-Gly*

**Molecular weight:** 1084.2 Da

**Storage:** Prior to reconstitution store at 2-8°C for one month or desiccated below -18°C. Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.