



Product Data Sheet

Cat # RP-1518

Argipressin

Size: 5 ug 25 ug

Introduction:

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.

Description:

Vasopressin Synthetic is a single, non-glycosylated polypeptide chain containing 9 amino acids, having a molecular mass of 1084.2 Dalton and a Molecular formula of C₄₆H₆₅N₁₆O₁₂S₂.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

The protein was lyophilized with no additives.

Solubility:

It is recommended to reconstitute the lyophilized Argipressin in sterile 18MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability:

Lyophilized Argipressin e although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Argipressin should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity:

Greater than 98.0% as determined by:(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Amino Acid Composition: Cys-Tyr-Phe-Gln-Asn-Cys-Pro-Arg-Gly

Usage:

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals. If supplied in powder then reconstitute it in 100 µl water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage..

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