



Product Data Sheet

Cat # RP-1504

Vasopressin

Size: 5 mg

Arginine vasopressin (AVP), also known as argipressin or antidiuretic hormone (ADH), is a human hormone that is released when the body is low on water; it causes the kidneys to conserve water, but not salt, by concentrating the urine and reducing urine volume. It also raises blood pressure by inducing moderate vasoconstriction. It has various effects in the brain. A very similar substance, lysine vasopressin (LVP) or lypressin, has the same function in pigs and is often used in human therapy. Vasopressin is a peptide hormone. It 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. AVP allows water reabsorption by the introduction of additional water channels in cortical and inner medullary collecting ducts.

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.

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Source: Vasopressin's molecular weight is 1084.23 Dalton having an amino acid sequence of Cys-Tyr-Phe-Gln-Asn-Pro-Lys-Arg-NH₂ and a molecular formula: C₄₆H₆₅N₁₅O₁₂S₂. The protein (1 mg/ml) was lyophilized with no additives.

Application and Suggested Dilution: It is recommended to reconstitute the lyophilized Vasopressin in sterile 18MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. Users must optimize concentration and conditions for each assay.

Storage and Stability: Lyophilized Vasopressin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Vasopressin 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.** 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.