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# AVP Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5558C

## Product Information

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|---|---|
| **Application** | IHC-P, IF, WB, E |
| **Primary Accession** | P01185 |
| **Other Accession** | NP_000481.2 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB26797 |
| **Calculated MW** | 17325 |
| **Antigen Region** | 102-129 |

## Additional Information

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| **Gene ID** | 551 |
| **Other Names** | Vasopressin-neurophysin 2-copeptin, AVP-NPII, Arg-vasopressin, Arginine-vasopressin, Neurophysin 2, Neurophysin-II, Copeptin, AVP, ARVP, VP |
| **Target/Specificity** | This AVP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 102-129 amino acids of human AVP. |
| **Dilution** | IHC-P~~1:100~500 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | AVP Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | AVP |
| **Synonyms** | ARVP, VP |

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| **Function** | Precursor of Arg-vasopressin, an antidiuretic hormone, and neurophysin 2, its carrier protein. |
| **Cellular Location** | Cytoplasmic vesicle, secretory vesicle {ECO:0000250\|UniProtKB:P01186}. Note=The precursor protein is packaged into neurosecretory granules. {ECO:0000250\|UniProtKB:P01186} [Neurophysin 2]: Secreted {ECO:0000250\|UniProtKB:P01186}. Cytoplasmic vesicle, secretory vesicle {ECO:0000250\|UniProtKB:P01186}. Note=Following processing, Arg-vasopressin and neurophysin 2 are transported to the posterior pituitary and stored in neurosecretory granules at the nerve termini until secreted. {ECO:0000250\|UniProtKB:P01186} |

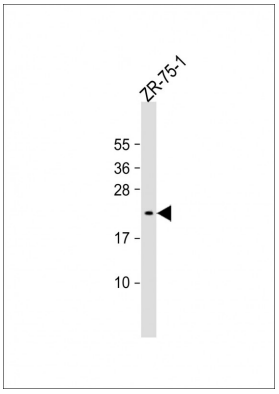
## Background

This gene encodes a precursor protein consisting of arginine vasopressin and two associated proteins, neurophysin 2 and a glycopeptide, copeptin. Arginine vasopressin is a posterior pituitary hormone which is synthesized in the supraoptic nucleus and paraventricular nucleus of the hypothalamus. Along with its carrier protein, neurophysin 2, it is packaged into neurosecretory vesicles and transported axonally to the nerve endings in the neurohypophysis where it is either stored or secreted into the bloodstream. The precursor is thought to be activated while it is being transported along the axon to the posterior pituitary. Arginine vasopressin acts as a growth factor by enhancing pH regulation through acid-base transport systems. It has a direct antidiuretic action on the kidney, and also causes vasoconstriction of the peripheral vessels. This hormone can contract smooth muscle during parturition and lactation. It is also involved in cognition, tolerance, adaptation and complex sexual and maternal behaviour, as well as in the regulation of water excretion and cardiovascular functions.

## References

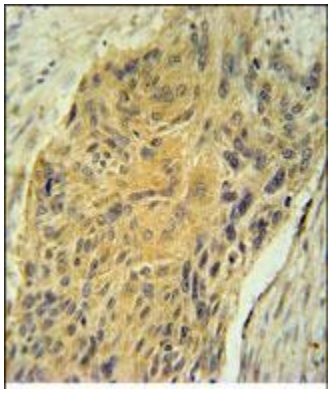

Abu Libdeh, A., et al. Eur. J. Endocrinol. 162(2):221-226(2010)
Cirillo, M. Kidney Int. 77(1):5-6(2010)
Meijer, E., et al. Kidney Int. 77(1):29-36(2010)
Birk, J., et al. J. Cell. Sci. 122 (PT 21), 3994-4002 (2009)

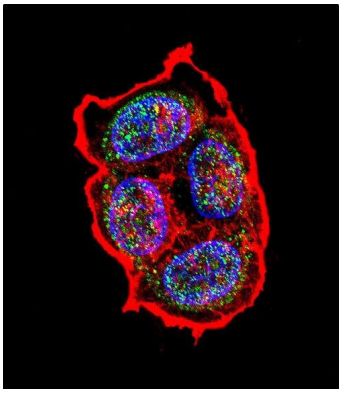

## Images




Anti-AVP Antibody (Center) at 1:1000 dilution + ZR-75-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 17 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

AVP Antibody (Center) (Cat. #AP5558c) immunohistochemistry analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the AVP Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.





Confocal immunofluorescent analysis of AVP Antibody (Center)(Cat#AP5558c) with ZR-75-1 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.