

Anti-Pre-Pro-Vasopressin

Our Pre-Pro-Vasopressin rabbit polyclonal primary antibody from PhosphoSolutions is produced in-hous Catalog # AN1603

Specification

Anti-Pre-Pro-Vasopressin - Product Information

Application	WB, IHC
Primary Accession	<u>P01185</u>
Reactivity	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Calculated MW	17325

Anti-Pre-Pro-Vasopressin - Additional Information

Gene ID

551

Other Names

ADH antibody, Antidiuretic hormone antibody, Arginine vasopressin neurophysin II antibody, ARVP antibody, AVP antibody, AVP NPII antibody, copeptin antibody, Vasopressin neurophysin II copeptin antibody, VP antibody

Target/Specificity

Vasopressin is a nine amino-acid peptide hormone that plays a key role in water and blood pressure homeostasis (Qureshi S., et al 2014). Vasopressin is the end-product of a highly processed 164 amino acid pre-pro-peptide. Processing of the vasopressin pre-pro-peptide results in three distinct peptides with a 1:1:1 ratio: vasopressin, neurophysin II, and copeptin (Arroyo J.P. et al, 2021). Vasopressin is the biologically active hormone, neurophysin II is a carrier molecule for vasopressin, and copeptin is the c-terminal glycosylated end-product. Vasopressin has been thought to be primarily made in the brain, and the sole source of vasopressin stimulating vasopressin V2 receptors in the kidney until recent studies (Arroyo JP, et al 2022). This antibody specially detects uncleaved pre-pro-vasopressin, accurately identifying locally produced vasopressin versus peripheral uptake of hypothalamic vasopressin or related peptides (Arroyo I.P. et al, 2022). This key research tool aided the Arroyo group in discovering immunoreactive vasopressin outside of the brain by recognizing localized vasopressin in human and mouse kidney, specifically in the distal nephron.

Dilution WB~~1:1000 IHC~~1:100~500

Format Antigen Affinity Purified from Pooled Serum

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions



Anti-Pre-Pro-Vasopressin is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

Anti-Pre-Pro-Vasopressin - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

Anti-Pre-Pro-Vasopressin - Images



Immunofluorescence of healthy human kidney. The antibody specifically labels pre-pro-vasopressin (white) in the collecting ducts (DBA, red), but not in the proximal tubules (LTL, green) of human kidney. DNA is labeled with DAPI (blue). Image kindly provided by JP Arroyo, Vanderbilt University.





Western blot of mouse whole brain lysate showing specific immunolabeling of the \sim 20 kDa uncleaved pre-pro vasopressin protein.



Anti-Pre-Pro-Vasopressin - Background

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