

# AVPR2 polyclonal antibody

Catalog # PAB7492 Size 100 ug

Specification	
Product Description	Goat polyclonal antibody raised against synthetic peptide of AVPR2.
Immunogen	A synthetic peptide corresponding to human AVPR2.
Sequence	CARGRTPPSLGPQDE
Host	Goat
Theoretical MW (kDa)	40.3
Form	Liquid
Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:64000) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

## **Applications**

Enzyme-linked Immunoabsorbent Assay



Gene Info — AVPR2	
Entrez GenelD	<u>554</u>
Protein Accession#	NP_000045.1
Gene Name	AVPR2
Gene Alias	ADHR, DI1, DIR, DIR3, MGC126533, MGC138386, NDI, V2R
Gene Description	arginine vasopressin receptor 2
Omim ID	300538 300539 304800
Gene Ontology	Hyperlink
Gene Summary	This gene encodes the vasopressin receptor, type 2, also known as the V2 receptor, which belon gs to the seven-transmembrane-domain G protein-coupled receptor (GPCR) superfamily, and co uples to Gs thus stimulating adenylate cyclase. The subfamily that includes the V2 receptor, the V 1a and V1b vasopressin receptors, the oxytocin receptor, and isotocin and mesotocin receptors in non-mammals, is well conserved, though several members signal via other G proteins. All bind similar cyclic nonapeptide hormones. The V2 receptor is expressed in the kidney tubule, predomin antly in the distal convoluted tubule and collecting ducts, where its primary property is to respond to the pituitary hormone arginine vasopressin (AVP) by stimulating mechanisms that concentrate the urine and maintain water homeostasis in the organism. When the function of this gene is lost, the disease Nephrogenic Diabetes Insipidus (NDI) results. The V2 receptor is also expressed out side the kidney although its tissue localization is uncertain. When these 'extrarenal receptors' are stimulated by infusion of a V2 selective agonist (dDAVP), a variety of clotting factors are released into the bloodstream. The physiologic importance of this property is not known - its absence does not appear to be detrimental in NDI patients. The gene expression has also been described in fet al lung tissue and lung cancer associated with alternative splicing. [provided by RefSeq
Other Designations	OTTHUMP00000026011

#### **Publication Reference**

Vasopressin V2 receptor expression along rat, mouse, and human renal epithelia with focus on TAL.

Mutig K, Paliege A, Kahl T, Jons T, Muller-Esterl W, Bachmann S.

American Journal of Physiology. Renal Physiology 2007 Oct; 293(4):F1166.

Application: IHC, Human, Mouse, Human, Mouse kidney

### Pathway



Neuroactive ligand-receptor interaction

#### Disease

- Cardiovascular Diseases
- Dehydration
- Diabetes Insipidus
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Mental Disorders