

Product name:	AVP Receptor V2 Rabbit Polyclonal Antibody
Cat number:	ABN07379
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from human AVP Receptor V2. at AA range: 1-50
Reactivity:	Human, Mouse
Applications:	WB 1:500-1:2000, ELISA 1:10000-1:20000
Molecular Weight:	57kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes the vasopressin receptor, type 2, also known as the V2 receptor, which belongs to the seven-transmembrane-domain G protein-coupled receptor (GPCR) superfamily, and couples to Gs thus stimulating adenylate cyclase. The subfamily that includes the V2 receptor, the V1a 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, predominantly 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 disease: Defects in AVPR2 are the cause of diabetes insipidus nephrogenic X-linked (XNDI) [MIM:304800]; also known as diabetes insipidus nephrogenic type 1. XNDI is caused by the inability of the renal collecting ducts to absorb water in response to arginine vasopressin. It is characterized by excessive water drinking (polydipsia), excessive urine excretion (polyuria), persistent hypotonic urine, and hypokalemia. disease: Defects in AVPR2 are the cause of nephrogenic syndrome of inappropriate antidiuresis (NSIAD) [MIM:300539]. This disorder is characterized by an inability to excrete a free water load, with inappropriately concentrated urine and resultant hyponatremia, hypoosmolarity, and natriuresis. function: Receptor for arginine vasopressin. The activity of this receptor is mediated by G proteins which activate adenylate cyclase. online information: AVPR2 pages, similarity: Belongs to the G-protein coupled receptor 1 family. tissue specificity: Kidney.