Product Name: AVP Receptor V2 Rabbit Polyclonal Antibody
Catalog #: APRab07379
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:10000-1:20000
Molecular Weight	57kDa

Antigen Information

Gene Name	AVPR2
Alternative Names	Vasopressin V2 receptor (V2R) (AVPR V2) (Antidiuretic hormone receptor) (Renal-type arginine vasopressin receptor)
Gene ID	554.0
SwissProt ID	P30518
Immunogen	Synthesized peptide derived from human AVP Receptor V2. at AA range: 1-50

Background

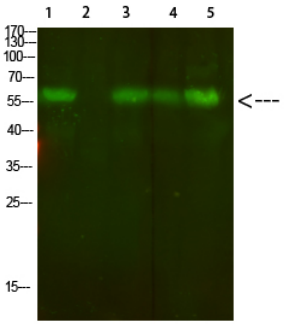
This gene encodes the vasopressin receptor, type 2, also known as the V2 receptor, which belongs to the seven-

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 Insipidusdisease: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 (polydypsia), 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.,

Research Area

Neuroactive ligand-receptor interaction;

Image Data



Western Blot analysis of 1,mouse-lung 2,mouse-spleen 3,mouse-kidney 4,mouse-heart 5,293 cells using AVP Receptor V2 Rabbit Polyclonal Antibody diluted at 1:500 (4°C overnight). Secondary antibody: Goat Anti-rabbit IgG IRDye 800 (diluted at 1:5000, 25°C, 1 hour)