



Anti-AVPR2 polyclonal antibody (DPAB-DC2405)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description

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 G_s 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 (NDI) results. The V2 receptor is also expressed outside 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 fetal lung tissue and lung cancer associated with alternative splicing.

Immunogen	A synthetic peptide corresponding to human AVPR2. The sequence is CARGRTPPSLGPQDE
Source/Host	Goat
Species Reactivity	Human
Purification	Antigen affinity purification
Conjugate	Unconjugated
Applications	ELISA,
Format	Liquid

Concentration	0.5 mg/mL
Size	100 µg
Buffer	In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)
Preservative	0.02% Sodium Azide
Storage	Store at -20°C. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	AVPR2 arginine vasopressin receptor 2 [Homo sapiens (human)]
Official Symbol	AVPR2
Synonyms	AVPR2; arginine vasopressin receptor 2; DI1; DIR; NDI; V2R; ADHR; DIR3; vasopressin V2 receptor; AVPR V2; antidiuretic hormone receptor; renal-type arginine vasopressin receptor;
Entrez Gene ID	554
Protein Refseq	NP_000045
UniProt ID	P30518
Chromosome Location	Xq28
Pathway	Aquaporin-mediated transport; Class A/1 (Rhodopsin-like receptors); GPCR downstream signaling; GPCRs, Class A Rhodopsin-like
Function	protein binding; vasopressin receptor activity;