

Datasheet for ABIN7596967

## AVPR2 Protein (DYKDDDDK Tag, Strep Tag)



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### Overview

Quantity:	10 µg
Target:	AVPR2
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc
Purification tag / Conjugate:	This AVPR2 protein is labelled with DYKDDDDK Tag, Strep Tag.
Application:	Immunogen (Imm), ELISA, Surface Plasmon Resonance (SPR), Phage Display (PhD), Cryogenic electron microscopy (cryo-EM)

### Product Details

Purpose:	Human V2R-Strep full length protein-synthetic nanodisc
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### Target Details

Target:	AVPR2
Alternative Name:	V2R ( <a href="#">AVPR2 Products</a> )
Background:	<p>ADHR, DI1, DIR, DIR3, NDI, NDI1, V2R</p> <p>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</p>

## Target Details

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. [provided by RefSeq, Jul 2008]

Molecular Weight: The human full length V2R-Strep protein has a MW of 40.3 kDa

UniProt: [P30518](#)

Pathways: [cAMP Metabolic Process](#)

## Application Details

Comment: Advantages:

- Highly purified membrane proteins
- High solubility in aqueous solutions
- High stability
- Proteins are in a native membrane environment and remain biologically active
- No detergent and can be used for cell-based assays
- No MSP backbone proteins
- Mammalian cell expression system ensures post- translational modifications

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Buffer: Solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage: -20 °C,-80 °C

Storage Comment: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing).  
Lyophilized proteins are shipped at ambient temperature.

## Handling

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Expiry Date: 12 months