

Product datasheet for **RG210914**

AVPR V2 (AVPR2) (NM_000054) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AVPR V2 (AVPR2) (NM_000054) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AVPR V2
Synonyms:	ADHR; DI1; DIR; DIR3; NDI; NDI1; V2R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210914 representing NM_000054 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTCATGGCGTCCACCACTTCCGCTGTGCCTGGGCATCCCTCTCTGCCAGCCTGCCAGCAACAGCA
GCCAGGAGAGGCCACTGGACACCCGGGACCCGCTGCTAGCCCGGGCGGAGCTGGCGCTGCTCTCCATAGT
CTTTGTGGCTGTGGCCCTGAGCAATGGCCTGGTGTGCTGGCGCCCTAGCTCGCGGGGCCGGGGCCAC
TGGGCACCCATACACGTCTTCATTGGCCACTTGTGCCTGGCCGACCTGGCCGTGGCTCTGTTCCAAGTGC
TGCCCCAGCTGGCCTGGAAGGCCACCGACCGCTTCCGTGGCCAGATGCCCTGTGTGGGCCGTGAAGTA
TCTGCAGATGGTGGCATGTATGCCTCCTCTACATGATCCTGGCCATGACGCTGGACCGCCACCGTGCC
ATCTGCCGTCCCATGCTGGCGTACCGCCATGGAAGTGGGGCTCACTGGAACCGGCCGGTGTAGTGGCTT
GGGCTTCTCGCTCCTTCTCAGCCTGCCCCAGCTTTCATCTTCGCCAGCGCAACGTGGAAGTGGCAG
CGGGGTCACTGACTGCTGGGCTGCTTTGCGGAGCCCTGGGGCCGTCGCACCTATGTACCTGGATTGCC
CTGATGGTGTTCGTGGCACCTACCCTGGGATCGCCGCTGCCAGGTGCTCATCTCCGGAGATTATG
CCAGTCTGGTCCAGGGCCATCAGAGAGGCCTGGGGGCGCCGACGGGGACCGGACAGGCAGCCCCGG
TGAGGGAGCCACGTGTCAGCAGCTGTGGCCAAGACTGTGAGGATGACGCTAGTATTGTGGTCTGCTAT
GTGCTGTGCTGGCACCCTTCTTCTGGTGCAGCTGTGGCCGCTGGGACCCGGAGCCACTCTGGAAG
GGGCGCCCTTTGTGCTGCTCATGTTGCTGGCCAGCCTCAACAGCTGCACCAACCCCTGGATCTATGCATC
TTTCAGCAGCAGCGTGTCTCAGAGCTGCGAAGCTTGTCTGCTGTGCCGGGGACGCACCCACCCAGC
CTGGGTCCCAAGATGAGTCTGCACCACCGCCAGCTCCTCCCTGGCCAAGGACACTTCATCG

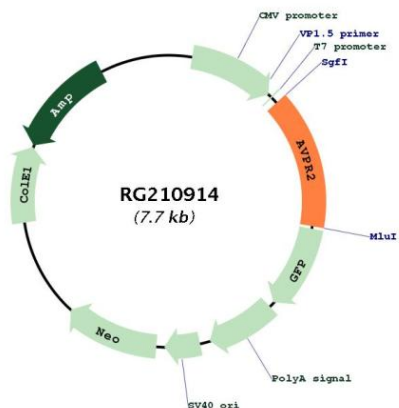
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_000054.2 , NP_000045.1
RefSeq Size:	1809 bp
RefSeq ORF:	1116 bp
Locus ID:	554
UniProt ID:	P30518
Cytogenetics:	Xq28
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Neuroactive ligand-receptor interaction
Gene Summary:	<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 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]</p>

Product images:



Circular map for RG210914