

Product datasheet for **RC228242**

AVPR V2 (AVPR2) (NM_001146151) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AVPR V2 (AVPR2) (NM_001146151) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AVPR V2
Synonyms:	ADHR; DI1; DIR; DIR3; NDI; NDI1; V2R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<p>>RC228242 representing NM_001146151</p> <p>Red=Cloning site Blue=ORF Green=Tags(s)</p>

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGCTCATGGCGTCCACCACTTCCGCTGTGCCTGGGCATCCCTCTCTGCCAGCCTGCCAGCAACAGCA
 GCCAGGAGAGGCCACTGGACACCCGGGACCCGCTGCTAGCCCGGGCGGAGCTGGCGCTGCTCTCCATAGT
 CTTTGTGGCTGTGGCCCTGAGCAATGGCCTGGTGTGGCGGCCCTAGCTCGGCGGGGCCGGCGGGGCCAC
 TGGGCACCCATACACGTCTTCATTGGCCACTTGTGCCTGGCCGACCTGGCCGTGGCTCTGTTCCAAGTGC
 TGCCCCAGCTGGCCTGGAAGGCCACCGACCGCTTCCGTGGCCAGATGCCCTGTGTGGGCCGTGAAGTA
 TCTGCAGATGGTGGGCATGTATGCCTCCTCTACATGATCCTGGCCATGACGCTGGACCGCCACCGTGCC
 ATCTGCCGTCCCATGCTGGCGTACCGCCATGGAAGTGGGGCTCACTGGAACCGGCCGGTGTAGTGGCTT
 GGGCCTTCTCGCTCCTTCTCAGCCTGCCCCAGCTCTTCATCTTCGCCAGCGCAACGTGGAAGGTGGCAG
 CGGGGTCACTGACTGCTGGGCCTGCTTTGCGGAGCCCTGGGGCCGTGCGACCTATGTACCTGGATTGCC
 CTGATGGTGTTCGTGGCACCTACCCTGGGTATCGCCGCTGCCAGGTGCTCATCTTCGGGAGATTATG
 CCAGTCTGGTGGCAGGGCCATCAGAGAGGCCTGGGGGGCGCCGAGGGGACGCCGACAGGCAGCCCCGG
 TGAGGGAGCCACGTGTCAGCAGCTGTGGCCAAGACTGTGAGGATGACGCTAGTGATTGTGGTCGTCTAT
 GTGCTGTGCTGGGCACCTTCTTCCTGGTGCAGCTGTGGCCGCGTGGGACCCGAGGCACCTCTGGAAG
 GTGGGTGTAGCCGTGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC228242 representing NM_001146151
 Red=Cloning site Green=Tags(s)

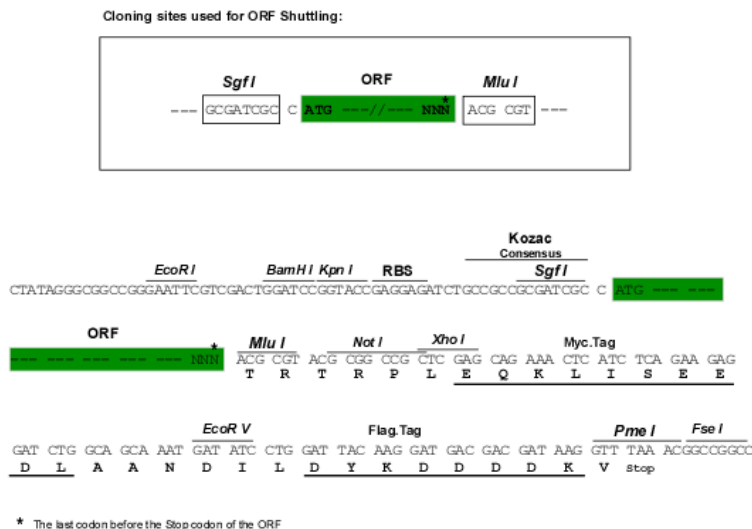
MLMASTTSAPVGHPSLPSLPSNSSQERPLDTRDPLLARAELALLSIVFVAVALSNGLVLAALARRGRRGH
 WAPIHVFIGHLCLADLAVALFQVLPQLAWKATDRFRGPDALCRAVKYLMVGMVASSYMILAMTLDRHRA
 ICRPMLAYRHGSGAHWNRPVLVAWAFSLLLSLPQLFIFAQRNVEGGSGVTDWCACFAEPWGRRTYVTWIA
 LMVFVAPTLGIAACQVLIFREIHASLVGPSPERPGRRRGRRTGSPGEGAHVSAAVAKTVRMTLVIVVVY
 VLCWAPFFLVQLWAAWDPEAPLEGGCSR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8051_a06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001146151

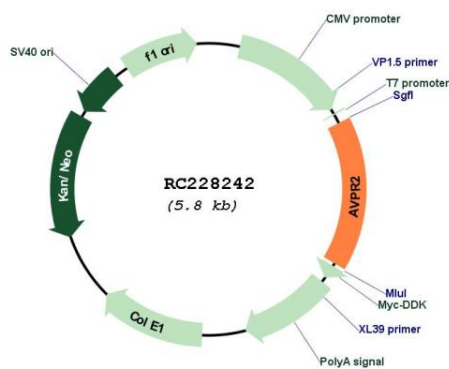
ORF Size: 927 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001146151.3
RefSeq ORF:	930 bp
Locus ID:	554
UniProt ID:	P30518
Cytogenetics:	Xq28
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Neuroactive ligand-receptor interaction
MW:	33.6 kDa
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 RC228242