

## Product datasheet for SC119972

### PRPH2 (NM\_000322) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PRPH2 (NM_000322) Human Untagged Clone
Tag:	Tag Free
Symbol:	PRPH2
Synonyms:	AOFMD; AVMD; CACD2; DS; MDBS1; PRPH; rd2; RDS; RP7; TSPAN22
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC119972 sequence for NM_000322 edited (data generated by NextGen Sequencing)

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ATGGCGCTACTGAAAGTCAAGTTTGACCAGAAGAAGCGGGTCAAGTTGGCCCAAGGGCTC
TGGTCATGAACTGGTTCTCCGTGTTGGCTGGCATCATCATCTTCAGCCTAGGACTGTTC
CTGAAGATTGAACTCCGAAAGAGGAGCGATGTGATGAATAATTCTGAGAGCCATTTTGTG
CCCAACTCATTGATAGGGATGGGGTGCTATCCTGTGTCTTCAACTCGCTGGCTGGGAAG
ATCTGCTACGACGCCCTGGACCCAGCCAAGTATGCCAGATGGAAGCCCTGGCTGAAGCCG
TACCTGGCTATCTGTGCCTCTTCAACATCATCCTCTTCCTTGTGGCTCTCTGCTGCTTT
CTGCTTCGGGGCTCGCTGGAGAACCCTGGGCAAGGGCTCAAGAACGGCATGAAGTAC
TACCGGGACACAGACACCCTGGCAGGTGTTTCATGAAGAAGACCATCGACATGCTGCAG
ATCGAGTTCAAAATGCTGCGGCAACAACGGTTTTTCGGGACTGGTTTGAGATTCAAGTGGATC
AGCAATCGCTACCTGGACTTTTCTCCAAAGAAGTCAAAGATCGAATCAAGAGCAACGTG
GATGGGCGGTACCTGGTGACGGCGTCCCTTTTCAGCTGCTGCAATCCTAGCTCGCCACGG
CCCTGCATCCAGTATCAGATCACCAACAACTCAGCACACTACAGTTACGACCACCAGACG
GAGGAGCTCAACCTGTGGGTGCGTGGCTGCAGGGCTGCCCTGCTGAGCTACTACAGCAGC
CTCATGAACTCCATGGGTGTCGTCACGCTCCTCATTTGGCTCTTCGAGGTGACCATTACA
ATTGGGCTGCGCTACCTACAGACGTCGCTGGATGGTGTGTCCAACCCGAGGAATCTGAG
AGCGAGAGCGAGGGCTGGCTGCTGGAGAAGAGCGTGCCGGAGACCTGGAAGGCCTTTCTG
GAGAGTGTGAAGAAGCTGGGCAAGGGCAACCAGGTGGAAGCCGAGGGCGCAGGCGCAGGC
CAGGCCCCAGAGGCTGGCTGA

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Clone variation with respect to NM\_000322.4  
318 t=>c;910 c=>g;929 g=>a;1013 a=>g



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_000322 unedited  
 ATTTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCATGGCGCTACT  
 GAAAGTCAAGTTTGACCAGAAGAAGCGGGTCAAGTTGGCCAGGGCTCTGGCTCATGAAC  
 TGGTTCTCCGTGTTGGCTGGCATCATCATCTTCAGCCTAGGACTGTTCTGAAGATTGAA  
 CTCCGAAAGAGGAGCGATGTGATGAATAATTCTGAGAGCCATTTGTGCCAACTCATTG  
 ATAGGGATGGGGTGTATCCTGTGTCTCAACTCGCTGGCTGGGAAGATCTGCTACGAC  
 GCCCTGGACCCAGCCAAGTATGCCAGATGGAAGCCCTGGCTGAAGCCGTACCTGGCTATC  
 TGTGTCCTCTTCAACATCATCTCTTCTTGTGGCTCTCTGCTGCTTTCTGCTTCGGGGC  
 TCGCTGGAGAACCCTGGGCCAAGGGCTCAAGAACGGCATGAAGTACTACCGGGACACA  
 GACACCCCTGNGCAGGTGTTTCATGAAGAAGACCATCGACATGCCTGCAGATCGAGTTCA  
 AATGCTGCGGAACAACGGTTTTTCGGGAAGTGGTTGGNAATTCAGTGGATCAGCAATCGC  
 TACCTGNACTTTTCTCCAAAGAGTCAAAGAGTGCAGGATGAGCAAGCTGGCAGTGTCT  
 TTTGGGTGNGAGAGGTANAACATGCGGGAGCTCAGACATNTTGAACCAAGCACTACCA  
 CCCCAGAGGCCACCTGTGGGGTCCCCTCTGGAGGGGAAAAGCTGGCACCAGCTTTG  
 CTCTTACATTCTCCCAGACCCAGACTACGTCATAGACCCNGGTGTGGGGGCGCT  
 CTTGGGGGGACGGCTTTTTAGTGTGCATCTACTCGCACGCCTGATCN

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_000322 unedited  
 TTTTNNAAATTTTTCTGAACCGCGCCGATTCTANGATCGAGTTTTTTTTTTTTTTTTTT  
 TTTTTTTTTTTTTTTTCCATACAGNATGAATTTAATTATCTATTGACAGCTGTTAACAG  
 CATAGTTACACTTGGGGGCTAAAGCAGCACTTTCACCGGGTTCAGCACTCTTGAAA  
 GATAGCAAGAGCTCAGGGACCTTGGCAAAAATGGCTGGCTCAGATTTTTTTCAGTATGG  
 ATCATTCTTGGCCTCAACGAGATTCAAAAATCTAATTAACCTGGGACCAACGCTCTGAC  
 AGGGTGTCCAAACATCTTGGATCTGGTCTCTGCTTGGGGGAATTAAGCCAGAACATAC  
 CCCAGCAGCACCAAGTCTTATTTTTCTTACACTAAAGTTCTTAGGACAGCAAAGACCC  
 CAACTCAGTCCAAAGTACCTATCCCAAACACCATCGTCAAAGCAGAGGTAAGTATGGAC  
 TGTTCCTTTCTGGTTTTGCCTTTTGCCTGGGCTCCAGCCAGTAAGAACGAGCTCTCTG  
 AATGTCATCCAACCTGGAGGAATATGCTGGGCCCTGCCTTGGTTGGGCACCAAGGGCTTG  
 GAAATCACCAAATCTTCTTTTCCCTGAAAACCTTTTTTTCTAAAGAAAGGAAAC  
 CTCCTGTTTTGGCTGCCTACGAAAAAGGGCCTTCCAAAAGATTTCTTTGATGCCAAAG  
 CATTCCAAAAATAGGGTTTTTAAAAAGGGTTCTTGGGGGAAAAAACGAAAAACCCCA  
 AAGAAATCTTGGCCCTTGTGGGAACATAATGGTGCCCTGGGGCTGGAGGCACCTTGGGG  
 GGGGCCCTGGCCCCAAAACGAGCCGGGTCAAAGGGGAACAGGGGAAGGGGCGCCTT  
 TCCAAAGGGGAAAACCTACCCTGTTTCCCGAAACCAGGAAAACCGCCTTGGGGGG

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_000322

**Insert Size:**

3000 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_000322.2</a> , <a href="#">NP_000313.1</a>
<b>RefSeq Size:</b>	2974 bp
<b>RefSeq ORF:</b>	1041 bp
<b>Locus ID:</b>	5961
<b>UniProt ID:</b>	<a href="#">P23942</a>
<b>Cytogenetics:</b>	6p21.1
<b>Domains:</b>	transmembrane4
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Amyotrophic lateral sclerosis (ALS)
<b>Gene Summary:</b>	<p>The protein encoded by this gene is a member of the transmembrane 4 superfamily, also known as the tetraspanin family. Most of these members are cell-surface proteins that are characterized by the presence of four hydrophobic domains. The proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. This encoded protein is a cell surface glycoprotein found in the outer segment of both rod and cone photoreceptor cells. It may function as an adhesion molecule involved in stabilization and compaction of outer segment disks or in the maintenance of the curvature of the rim. This protein is essential for disk morphogenesis. Defects in this gene are associated with both central and peripheral retinal degenerations. Some of the various phenotypically different disorders are autosomal dominant retinitis pigmentosa, progressive macular degeneration, macular dystrophy and retinitis pigmentosa digenic. [provided by RefSeq, Jul 2008]</p>