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Product datasheet for RG210357

PRPH2 (NM_000322) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRPH2 (NM_000322) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PRPH2
Synonyms:	AOFMD; AVMD; CACD2; DS; MDBS1; PRPH; rd2; RDS; RP7; TSPAN22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG210357 representing NM_000322
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGCTACTGAAAGTCAAGTTTGACCAGAAGAAGCGGGTCAAGTTGGCCCAAGGGCTCTGGCTCATGA
ACTGGTTCTCCGTGTTGGCTGGCATCATCATCTTCAGCCTAGGACTGTTCCTGAAGATTGGACTCCGAAA
GAGGAGCGATGTGATGAATAATTCTGAGAGCCATTTTGTGCCCAACTCATTGATAGGGATGGGGGTGCTA
TCCTGTGTCTTCAACTCGCTGGCTGGGAAGATCTGCTACGACGCCCTGGACCCAGCCAAGTATGCCAGAT
GGAAGCCCTGGCTGAAGCCGTACCTGGCTATCTGTGTCCTCTTCAACATCATCCTCTTCCTTGTGGCTCT
CTGCTGCTTTCTGCTTCGGGGCTCGCTGGAGAACACCCTGGGCCAAGGGCTCAAGAACGGCATGAAGTAC
TACCGGGACACAGACACCCCTGGCAGGTGTTTCATGAAGAAGACCATCGACATGCTGCAGATCGAGTTCA
AATGCTGCGGCAACAACGGTTTTCGGGACTGGTTTGAGATTCAGTGGATCAGCAATCGCTACCTGGACTT
TTCCTCCAAAGAAGTCAAAGATCGAATCAAGAGCAACGTGGATGGGCGGTACCTGGTGGACGGCGTCCCT
TTCAGCTGCTGCAATCCTAGCTCGCCACGGCCCTGCATCCAGTATCAGATCACCAACAACTCAGCACACT
ACAGTTACGACCACCAGACGGAGGAGCTCAACCTGTGGGTGCGTGGCTGCAGGGCTGCCCTGCTGAGCTA
CTACAGCAGCCTCATGAACTCCATGGGTGTCGTCACGCTCCTCATTTGGCTCTTCGAGGTGACCATTACA
ATTGGGCTGCGCTACCTACAGACGTCGCTGGATGGTGTGTCCAACCCCGAGGAATCTGAGAGCGAGAGCG
AGGGCTGGCTGCTGGAGAAGAGCGTGCCGGAGACCTGGAAGGCCTTTCTGGAGAGTGTGAAGAAGCTGGG
CAAGGGCAACCAGGTGGAAGCCGAGGGCGCAGGCGCAGGCCAGGCCCCAGAGGCTGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

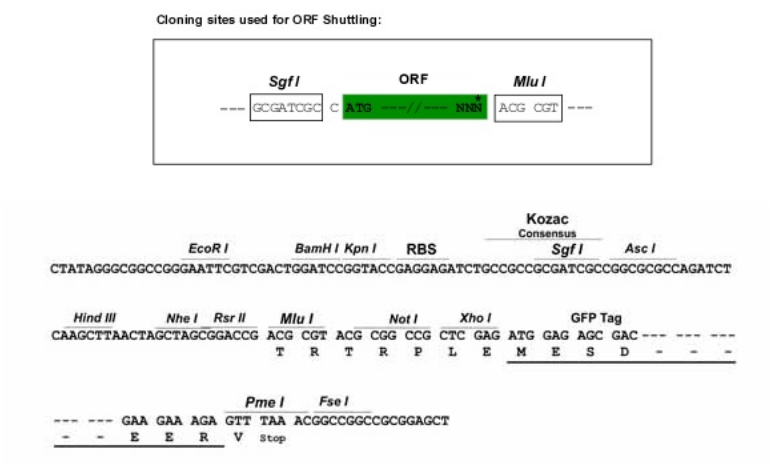
>RG210357 representing NM_000322
Red=Cloning site Green=Tags(s)

MALLKVKFDQKKRVKLAQGLWLMNWFSVLAGIIIFSLGLFLKIGLRKRSDVMNNSESHFVPNSLIGMGVL
SCVFNSLAGKICYDALDPAKYARWKPWLKPYLAICVLFNIILFLVALCCFLLRGSLENTLGQGLKNGMKY
YRDTDTPGRCFMKKTIDMLQIEFKCCGNNGFRDWFEIQWISNRYLDFSSKEVKDRIKSNVDGRYLVDGVP
FSCCNPSSPRPCIQYQITNNSAHYSYDHQTEELNLWVRGCRAALLSYYSSLMNSMGVVTLLIWLFEVTIT
IGLRYLQTSLDGVSNPEESESESESEGWLLEKSVPETWKAFLESVKKLGKGNQVEAEGAGAGQAPEAG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000322

ORF Size: 1038 bp

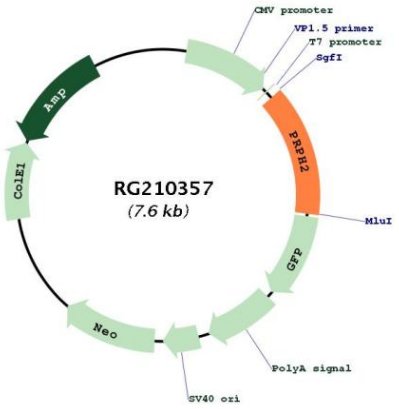
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	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_000322.3, NP_000313.2
RefSeq Size:	2975 bp
RefSeq ORF:	1041 bp
Locus ID:	5961
UniProt ID:	P23942
Cytogenetics:	6p21.1
Domains:	transmembrane4
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Amyotrophic lateral sclerosis (ALS)
Gene Summary:	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]

Product images:



Circular map for RG210357