

Product datasheet for RC219283

RP1 (NM_006269) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RP1 (NM_006269) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RP1
Synonyms:	DCDC4A; ORP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219283 representing NM_006269 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGTGATACCCCTTCTACTGGTTTTCCATCATTATCCTACGTCTTCTGAAGGTCAAGTTCACCCC
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Protein Sequence:

>RC219283 representing NM_006269
 Red=Cloning site Green=Tags(s)

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 MPHGS DSEPFHEDLLDVRNETCAKERIANHHTEEK GSHQSERVCTSVTHSFI SAGNKVYVSDDAIKNQP
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_006269

ORF Size: 6468 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_006269.2](#)

RefSeq Size: 7100 bp

RefSeq ORF: 6471 bp

Locus ID: 6101

UniProt ID: [P56715](#)

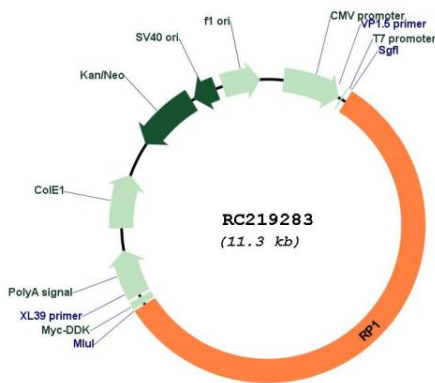
Cytogenetics: 8q11.23-q12.1

Protein Families: Druggable Genome

MW: 240.5 kDa

Gene Summary: This gene encodes a member of the doublecortin family. The protein encoded by this gene contains two doublecortin domains, which bind microtubules and regulate microtubule polymerization. The encoded protein is a photoreceptor microtubule-associated protein and is required for correct stacking of outer segment disc. This protein and the RP1L1 protein, another retinal-specific protein, play essential and synergistic roles in affecting photosensitivity and outer segment morphogenesis of rod photoreceptors. Because of its response to in vivo retinal oxygen levels, this protein was initially named ORP1 (oxygen-regulated protein-1). This protein was subsequently designated RP1 (retinitis pigmentosa 1) when it was found that mutations in this gene cause autosomal dominant retinitis pigmentosa. Mutations in this gene also cause autosomal recessive retinitis pigmentosa. Transcript variants resulted from an alternative promoter and alternative splicings have been found, which overlap the current reference sequence and has several exons upstream and downstream of the current reference sequence. However, the biological validity and full-length nature of some variants cannot be determined at this time.[provided by RefSeq, Sep 2010]

Product images:



Circular map for RC219283