

Product datasheet for MC226947

Rp2 (NM_001290644) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Rp2 (NM_001290644) Mouse Untagged Clone

Tag: Tag Free Symbol: Rp2

Synonyms: Al662636; Rp2h

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC226947 representing NM_001290644

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTTTAGTGGACTGAAGGATGAAACAGTAGGTCGCTTACCTGGAAAAGTGGCAGGACAACAATTTGTCA
TTCAAGACTGTGAGAACTGTAACATCTATATTTTTGACCACTCAGCTACTATTACCATTGATGACTGCAC
TAACTGTGTAATTTTTTTGGGACCAGTGAAAGGCAGTGTCTTTTTCCGAAATTGTAGAGATTGCAAGTGC
ACACTGGCTTGCCAGCAATTTCGTGTGAGAGACTGTAGAAAGTTGGAAGTCTTTTTTGTGCTGTGCTACTC
AACCCATTATTGAATCTTCCACAAACATCAAGTTTGGCTGTTTTCAATGGTACTACCCTGAATTAGCAGC
CCAATTCAAAGATGCAGGCCTCAGTATCTTCAATAACATTTGGAGTCATGTTCATGATTTTACACCTGTG
TCAGGAGAGCTCAACTGGAGCCTTCTTCCAGAAAATGCCGTGGTTCAAGACTATGTTCCTATCCCAATGA
CTGAAGAATTCAAAGCTGTGCGAATTTCCACAGAAGCCAATAGAAGCATTGTTCCTGTGTCCCGGGGTCA
GAGACAGAAGTACAGTGATGAATCATGTCTTGTGGTATTATTTGCCGATGATTATACAACTGCAAATGCC
AGGAAACTAATTGATGAGAGTGGTTGGTAAAGGCTTCTCCCTAGTGCAGACAAAGGAAATGTCAATGAAAA
CTGAAGACGCCCAAAGGGTTTTCCAGGAAAAGGCATCAGATTTTTTACTTCTTCTAAACAAAGGTCCTGT
GATTGCCTTGGAATTTAATGGAGATGACGCTGTACAAGAATGTCACCTTATTGTAAATGGGATGTTCAAC
GGGACAAAGATGTTTGTATCAGAAAAAGAAGGAGCCCCATCTGGAGATGTTGATAGCTTCTATAACTTTG
CTGAGATCCAGATGGGGATATGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_001290644



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Insert Size: 933 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).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 001290644.1</u>, <u>NP 001277573.1</u>

X A1.3

 RefSeq Size:
 4581 bp

 RefSeq ORF:
 933 bp

 Locus ID:
 19889

 UniProt ID:
 Q9EPK2

Cytogenetics:

Gene Summary: Acts as a GTPase-activating protein (GAP) involved in trafficking between the Golgi and the

ciliary membrane. Involved in localization of proteins, such as NPHP3, to the cilium membrane by inducing hydrolysis of GTP ARL3, leading to the release of UNC119 (or UNC119B). Acts as a GTPase-activating protein (GAP) for tubulin in concert with tubulin-specific chaperone C, but does not enhance tubulin heterodimerization. Acts as guanine

nucleotide dissociation inhibitor towards ADP-ribosylation factor-like proteins.

[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) contains an alternate exon in the 5' region and initiates translation at a downstream in-frame start codon, compared to variant 1. The encoded isoform (b) has a shorter N-terminus than isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record

were based on transcript alignments.