

Product datasheet for **MR229158**

Rp2 (NM_001290644) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rp2 (NM_001290644) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Rp2
Synonyms: A1662636; Rp2h
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR229158 representing NM_001290644
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTTTAGTGACTGAAGGATGAAACAGTAGGTCGCTTACCTGGAAAAGTGGCAGGACAACAATTTGTCA
TTCAAGACTGTGAGAACTGTAACATCTATATTTTTGACCACTCAGCTACTATTACCATTGATGACTGCAC
TAACTGTGTAATTTTTTTGGGACCAGTAAAGGCAGTGTCTTTTCCGAAATTGTAGAGATTGCAAGTGC
ACATTGGCTTGCCAGCAATTTTCGTGTGAGAGACTGTAGAAAGTTGGAAGTCTTTTGTGCTGTGCTACTC
AACCCATTATTGAATCTCCACAAACATCAAGTTTGGCTGTTTTCAATGGTACTACCTGAATTAGCAGC
CCAATTCAAAGATGCAGGCCTCAGTATCTTCAATAACATTTGGAGTCATGTTTCATGATTTTACACCTGTG
TCAGGAGAGCTCAACTGGAGCCTTCTCCAGAAAATGCCGTGGTTCAAGACTATGTTCTATCCCAATGA
CTGAAGAATCAAAGCTGTGCGAATTTCCACAGAAGCCAATAGAAGCATTGTTCTGTGTCCCGGGTCA
GAGACAGAAGTACAGTGTGAATCATGTCTTGTGGTATTATTTGCCGATGATTATACAAGTCAAATGCC
AGGAACTAATTGATGAGATGGTTGGTAAAGCCTTCTCCCTAGTGCAGACAAAGGAAATGCAATGAAAA
CTGAAGACGCCCAAAGGGTTTTCCAGAAAAGGCATCAGATTTTTACTTCTTCTAAACAAGGTCCTGT
GATTGCCTTGAATTTAATGGAGATGACGCTGTACAAGAATGTACCTTATTGTAATGGGATGTTCAAC
GGGACAAAGATGTTTGTATCAGAAAAGAAGGAGACCGCATCTGGAGATGTTGATAGCTTCTATAACTTTG
CTGAGATCCAGATGGGATA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR229158 representing NM_001290644
Red=Cloning site Green=Tags(s)

MFSGLKDETVGRLPGKVAGQQFVIQDCENCNIYIFDHSATITIDDCNTNCVIFLGPVKGSVFFRNCRDCKC
 TLACQQFRVRDCRKLFLCCATQPIIESSTNIKFGCFQWYYPELAAQFKDAGLSIFNNIWSHVHDFTPV
 SGELNWSLLPENAVVQDYVPIPMTEEFKAVRISTEANRSIVPVSQRQKYSDESCLVLFADDYTTANA
 RKLIDEMVGKGFSLVQTKEMSMKTEDAQRVVFQEKASDFLLLLLNKGPVIALEFNGDDAVQECHLIVNGMFM
 GTKMFVSEKKETASGDVDSFYNF AEIQMGI

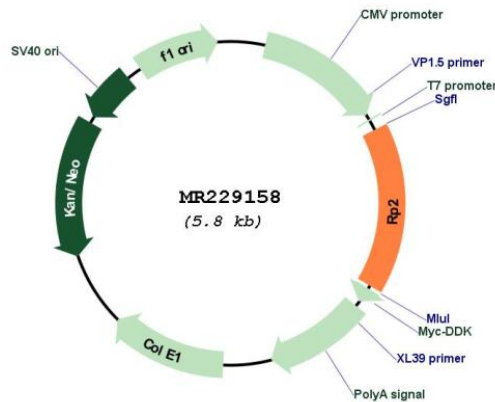
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001290644

ORF Size: 930 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:	<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.
RefSeq:	NM_001290644.1 , NP_001277573.1
RefSeq Size:	4581 bp
RefSeq ORF:	933 bp
Locus ID:	19889
UniProt ID:	Q9EPK2
Cytogenetics:	X A1.3
MW:	35.3 kDa
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]