

Product datasheet for **RG216256**

PRR16 (NM_016644) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	PRR16
Synonyms:	DSC54; LARGEN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG216256 representing NM_016644
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCACAATCTGGGCTCACTGCAACCTCTGCCTCCCAGGTTCAAGCTATTCTCCTGCCTCAGCCTGCCT
CAGTGCGCCACTACGCCTGGGTGGTTGACCAGATTGACACCTGACCTCTGACCTACAGCTGGAGGATGA
GATGACTGACAGCTCCAAAACGGACACGCTGAATAGTAGCTCAAGTGGCACAACAGCCTCCAGCCTAGAG
AAGATCAAAGTGCAGGCTAATGCACCGCTTATTAACCCCCAGCACCCATCTGCTATCCTCACGGTCC
TGAGAAAGCCAAACCTCCACCACCTCCTCAAGGTTGACACCTGTGAAGTGTGAAGACCCCAAAGGGT
GGTTCCAATGCCAATCCTGTAAAAACCAATGGCACCTTCTACGAAATGGAGGCTTACCAGGTGGACCT
AACAAAATTCAAATGGAGATATCTGCTGCATACCCAACAGTAACCTGGACAAGGCTCCAGTCCAGCTTC
TGATGCATAGACCTGAAAAAGACAGATGTCCCAGGCAGGGCCTCGAGAACGAGTTCGGTTTAATGAAAA
AGTACAGTACCATGGCTATTGTCTGACTGTATACCCGGTATAACATAAAAAACAGGGAGGTCCACTTA
CACAGTGAACCTGTCCACCCACCGGAAAGATTCTCACCAGGCCCTCCCTCCCTCCTACACCCCATC
TCCCTCCTTTCCCACTAGAAAATGGGGGAATGGGAATAAGCCACAGTAACAGCTTCCCCCTATCAGACC
TGCAACTGTGCTCCTCCCACTGCACAAAACACAGAAGACGATCTTGAGGAAGTCAACCACTACAACC
GTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG216256 representing NM_016644
Red=Cloning site Green=Tags(s)

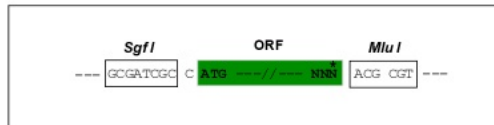
MAQSGLTATSASQVQAILLPQPASVRHYAVVDQIDTLTSDLQLEDEMTDSSKTDLTNSSSSGTTASSLE
KIKVQANAPLIKPPAHPAAILTVLRKPNPPPPPPRLTPVKCEDPKRVVPTANPVKTNGTLLRNGGLPGGP
NKIPNGDICCIPNSNLDKAPVQLLMHRPEKDRCQPAGPRERVRFNEKVQYHGYCPDCDTRYNIKNREVL
HSEPVHPPGKIPHQGPPLPPTPHLPPFPLENGMGISHSNSFPPIRPATVPPTAPKPQKILRKSTTTT
V

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCGCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGCCGCGGAGCT

- - E E R V Stop

ACCN: NM_016644

ORF Size: 843 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_016644.2](#)

RefSeq Size: 1798 bp

RefSeq ORF: 846 bp

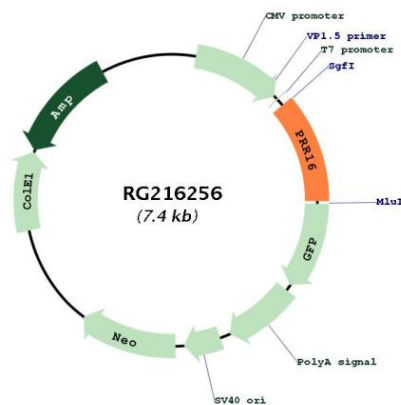
Locus ID: 51334

UniProt ID: [Q569H4](#)

Cytogenetics: 5q23.1

Gene Summary: Regulator of cell size that promotes cell size increase independently of mTOR and Hippo signaling pathways. Acts by stimulating the translation of specific mRNAs, including those encoding proteins affecting mitochondrial functions. Increases mitochondrial mass and respiration.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG216256