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Product datasheet for RG209489

PPP1R15B (NM_032833) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPP1R15B (NM_032833) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PPP1R15B
Synonyms:	CREP; MSSGM2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>RG209489 representing NM_032833
Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGGCGCGCCC

ATGGAGCCGGGGACAGGCGGATCGCGGAAACGGCTTGGCCCTCGGGCGGGCTTCCGGTTCTGGCCACCCT
TTTTCCCTCGGCGATCGCAAGCAGGCTCTTCTAAGTTCCCGACGCCTCTTGGCCCGGAAAACTCCGGGAA
CCCCACACTGCTTTCCTCTGCCCAGCCCGAGACTCGGGTCAGTTACTGGACGAAACTGCTCTCCCAGCTC
CTTGCGCCGCTCCCCGGATTGCTTCAGAAGGTGCTAATTTGGAGCCAACTTTTCGGTGGAATGTTTCCGA
CCAGATGGCTAGATTTTGCTGGAGTCTACAGCGCCCTGAGAGCCCTGAAGGGACGGGAGAAACCAGCCGC
CCCCACAGCGCAGAAATCTTTGAGTTCGCTGCAGCTCGACTCCTCAGACCCCTCGGTCACCAGTCCCCTT
GATTGGCTAGAGGAGGGGATCCACTGGCAATACTCGCCCCCAGACCTAAAATTGGAGCTTAAGGCCAAGG
GAAGTGCTTTGGACCCTGCAGCACAGGCTTTTCTCTTAGAGCAGCAGCTGTGGGGAGTGGAGCTGTTGCC
CAGTAGCCTTCAATCCCGTCTGTACTCTAACCGGGAACTTGGCTCTTCGCCCTCTGGGCCTCTAAACATT
CAACGCATAGACAATTTCAGTGTGGTATCCTATTTGCTGAACCCTTCCTACCTGGACTGCTTTCCTAGGC
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TGTCTGGCAAGTCTGATCTAGAGAATTCCTCCCAGTCTGGAAGCCTTCCTGAGACCCCTGAGCATAGTTC
TGGGGAGGAAGATGACTGGGAATCTAGTGCAGATGAAGCAGAGAGTCTCAAACTGTGGAACTCATTCTGT
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GCTGTCGTGACTCAGAGACCCCATCTGAGTCCATTGTGGCCATTTCTGAGTGTCACACCTTACTTTCTTG
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GTGATGAGGATCGCAAAGGACCATGGGAAGAATTTGCAAGGGATGGATGCAGGTTCCAGAAACGAATTCA
AGAAACAGAAGATGCTATTGGATATTGCTTGACATTTGAACACAGAGAAAGAATGTTTAATAGACTCCAG
GGAACATGCTTCAAAGGACTTAATGTTCTCAAGCAATGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG209489 representing NM_032833
Red=Cloning site Green=Tags(s)

MEPGTGGSRKRLGPRAGFRFWPPFFPRRSQAGSSKFPTPLGPENSGNPTLLSSAQPETRVSYWTKLLSQL
LAPLPGLLQKVLIWSQLFGGMFPTRWLDFAGVYSALRALKGREKPAAPTAQKSLSSLQLDSSDPSVTSPL
DWLEEGIHWQYSPPDLKLELKAKGSALDPAAQAFLLEQQLWGVELLPSSLQSRLYSNRELGSSPSGPLNI
QRIDNFSVVSYLLNPSYLDCFPRLEVSYQNSDGNSEVVGFQTLTPESSCLREDHCHPQPLSAELIPASWQ
GCPPLSTEGLPEIHHLRMKRLEFLQQASKGQDLPTPDQDNGYHSLEEEHSLLRMDPKHCRDNPTQFVPAA
GDIPGNTQESTEEKIELLTTEVPLALEEESPSEGCPSSEIPMEKEPGEGRISVVDYSYLEGDLPISARPA
CSNKLIDYILGGASSDLETSSDPEGEDWDEEAEDDGFDSDSSLSDSDLEQDPEGLHLWNSFCSVDPYNPQ
NFTATIQTAARIVPEEPSDSEKDLSGKSDLENSSQSGSLPETPEHSSGEEDDWESSADEAESLKLWNSFC
NSDDPYNPLNFKAPFQTSGENEKGCRDSETPSESIVAISECHTLLSCKVQLLGSQESECPDSVQRDVLSG
GRHTHVKRKKVTFLEEVTEYYISGDEDRKGPWEEFARDGCRFQKRIQETEDAIGYCLTFEHRERMFNRLQ
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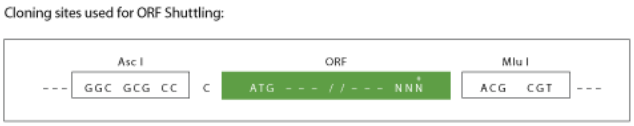
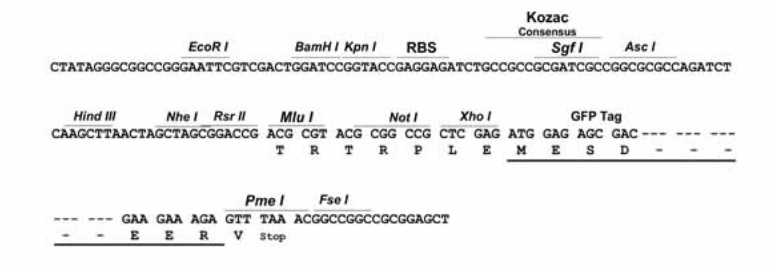
TRTRPLE - GFP Tag - V

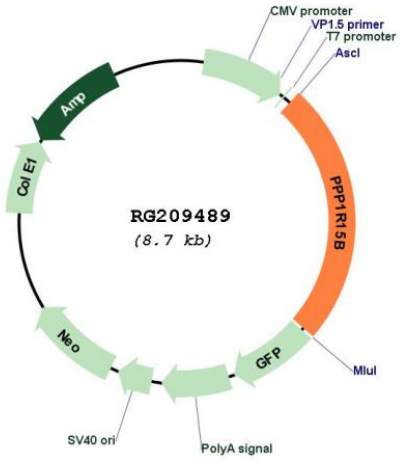
Restriction Sites: AscI-MluI

Cloning Scheme:





Plasmid Map:



ACCN:	NM_032833
ORF Size:	2139 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_032833.2, NP_116222.2
RefSeq Size:	5264 bp
RefSeq ORF:	2142 bp

Locus ID:	84919
Cytogenetics:	1q32.1
Protein Families:	Druggable Genome
Gene Summary:	This gene encodes a protein phosphatase I-interacting protein that promotes the dephosphorylation of eukaryotic translation initiation factor 2A to regulate translation under conditions of cellular stress. The transcribed messenger RNA contains two upstream open reading frames (ORFs) that repress translation of the main protein coding ORF under normal conditions, while the protein coding ORF is expressed at high levels in response to stress. Continual translation of the mRNA under conditions of eukaryotic translation initiation factor 2A inactivation is thought to create a feedback loop for reactivation of the gene during recovery from stress. In addition, it has been shown that this protein plays a role in membrane traffic that is independent of translation and that it is required for exocytosis from erythroleukemia cells. Allelic variants of this gene are associated with microcephaly, short stature, and impaired glucose metabolism. [provided by RefSeq, Feb 2016]