

Product datasheet for **RG204818**

NPR2L (NPRL2) (NM_006545) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	NPR2L
Synonyms:	FFEVF2; NPR2; NPR2L; TUSC4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG204818 representing NM_006545
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGGCAGCGGCTGCCGCATCGAATGCATATTCTTCAGCGAGTTCCACCTCACGCTGGGACCCAAGATCA
CCTATCAGGTCCCTGAAGACTTCATCTCCCGAGAGCTGTTTGACACAGTCCAAGTGTACATCATACCAA
GCCAGAGCTGCAGAACAAGCTTATCACTGTCACAGCTATGGAAAAGAAGCTGATCGGCTGTCCTGTGTGC
ATCGAACACAAGAAGTACAGCCGAATGCTCTCCTCTTCAACCTGGGCTTCGTGTGTATGCCAGGCCA
AGACCTGCGCCCTCGAGCCATTGTTAAAAAGCTGGCTGGCTATCTGACCACACTAGAGCTAGAGAGCAG
CTTCGTGTCCATGGAGGAGAGCAAGCAGAAGTTGGTGCCCATCATGACCATCTTGCTGGAGGAGCTAAAT
GCCTCAGGCCGGTGCACTCTGCCCATTGATGAGTCCAACACCATCCACTTGAAGGTGATTGAGCAGCGGC
CAGACCCTCCGGTGGCCAGGAGTATGATGTACCTGTCTTTACCAAGACAAGGAGGATTTCTTCAACTC
ACAGTGGGACCTCACTACACAACAAATCCTGCCCTACATTGATGGGTTCGCCACATCCAGAAGATTTC
GCAGAGGCAGATGTGGAGCTCAACCTGGTGCGCATTGCTATCCAGAACCTGCTGTACTACGGCGTTGTGA
CAAGTCCCTGCAAGAGGCATGTCTATCCTACGTGACCAAGCAAGGGCACAAGAGGGCCAGTCTCCGGGAT
GTGTTCCAGCTATACTGCAGCCTGAGCCCTGGCACTACCGTGCGAGACCTCATTGGCCGCCACCCCCAGC
AGCTGCAGCATGTTGATGAACGGAAGCTGATCCAGTTTCGGGCTTATGAAGAACCTCATCAGGCGACTACA
GAAGTATCCTGTGCGGGTGACTCGGGAAGAGCAGAGCCACCCTGCCGGCTTTATACAGGCTGCCACAGC
TATGACGAGATCTGCTGCAAGACAGGCATGAGCTACCATGAGCTGGATGAGCGGCTTGAAAATGACCCCA
ACATCATCATCTGCTGGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



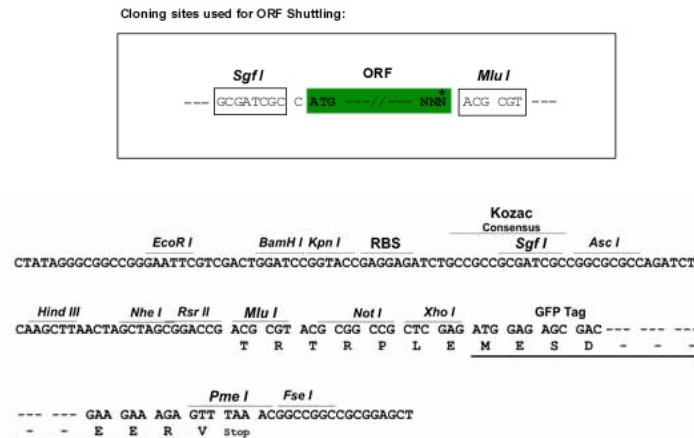
Protein Sequence: >RG204818 representing NM_006545
 Red=Cloning site Green=Tags(s)

MGSGCRIECFFSEFHLTLGPKITYQVPEDFISRELFDTVQVYIITKPELQNKLITVTAMEKKLIGCPVC
 IEHKKYSRNALLFNLGFVCDAAKTCALPIVKKLAGYLTLELESSFVSMEEKQLVPIMTILLEELN
 ASGRCTLPIDESNTIHLKVIEQRDPDPVAQEYDVPVFTKDKEDFFNSQWDLTTQILPYIDGFRHIQKIS
 AEADVELNLVRIAIQNLLYYGVVTLVSILQYSNVYCPYTPKVQDLVDDKSLQEACLSYVTKQGHKRASLRD
 VFQLYCSLSPGTTVRDLIGRHPQQLQHVDERKLIQFGLMKNLIRRLQKYPVRVTREEQSHPARLYTGCHS
 YDEICCKTGMSYHELDERLENDPNIIICWK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006545

ORF Size: 1140 bp

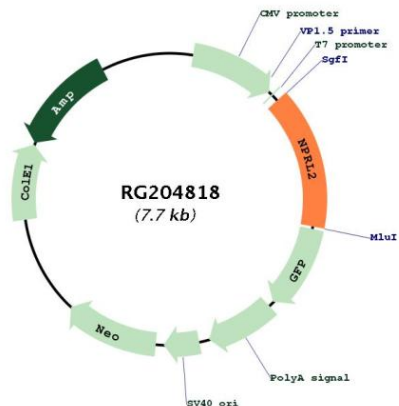
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<u>NM_006545.3</u>
RefSeq Size:	1672 bp
RefSeq ORF:	1143 bp
Locus ID:	10641
UniProt ID:	<u>Q8WTW4</u>
Cytogenetics:	3p21.31
Protein Families:	Druggable Genome
Gene Summary:	As a component of the GATOR1 complex functions as an inhibitor of the amino acid-sensing branch of the TORC1 pathway. The GATOR1 complex strongly increases GTP hydrolysis by RRAGA and RRAGB within RRAGC-containing heterodimers, thereby deactivating RRAGs, releasing mTORC1 from lysosomal surface and inhibiting mTORC1 signaling. The GATOR1 complex is negatively regulated by GATOR2 the other GATOR subcomplex in this amino acid-sensing branch of the TORC1 pathway.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG204818