

Product datasheet for **RG208170**

LRRC33 (NRROS) (NM_198565) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LRRC33 (NRROS) (NM_198565) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LRRC33
Synonyms:	ELLP3030; GARPL1; LRRC33; SENEAC; UNQ3030
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RG208170 representing NM_198565
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATGGAGTTGCTGCCTCTTTGGCTCTGCCTGGGTTTCACTTCCTGACCGTGGGCTGGAGGAACAGAAGCG
 GAACAGCCACAGCAGCCTCCCAAGGAGTCTGCAAGTTGGTGGGTGGAGCCGCTGACTGCCGAGGGCAGAG
 CCTCGCTTCGGTCCCCAGCAGCCTCCCGCCCCACGCCGGATGCTCACCTGGATGCCAACCTCTCAAG
 ACCCTGTGGAATCACTCCCTCCAGCCTTACCCTCTCTGGAGAGCCTCAGCCTGCACAGCTGCCACCTGG
 AGCGCATCAGCCGCGGCCCTTCCAGGAGCAAGGTCACTGCGCAGCCTGGTACTGGGGGACAATGCCT
 CTCAGAGAACTACGAAGAGACGGCAGCCGCCCTCCACGCCCTGCCGGGCTGCGGAGGCTGGACTGTCA
 GGAAACGCCCTGACGGAGGACATGGCAGCGCTCATGCTCCAGAACCTCTCTCGTGCCTGCGGTCCGTGCC
 TGGCGGGGAACACCATCATGCGGCTGGACGACTCCGTCTTCGAGGGCCTGGAGCGTCTCCGGGAGCTGGA
 TCTGCAGAGGAATACATCTTCGAGATCGAGGGCGCGCTTTCGACGGCCTGGCTGAGCTGAGGCACCTC
 AACCTGGCCTTCAACAACCTCCCTGCATCGTGGACTTCGGGCTCACGCGCTGCGGGTCTCAACGTCA
 GCTACAACGTCTCGAGTGGTTCCTCGCGACCGGGGGAGAGGCTGCCTTCGAGCTGGAGACGCTGGACCT
 GTCTCACAACAGCTGCTGTTCTTCCCGCTGCTGCCCCAGTACAGCAAGTTGCGGACCCTCTGCTGCGC
 GACAACAACATGGGCTTCTACCGGGACCTGTACAACACCTCGTCGCCGAGGGAGATGGTGGCCAGTTCC
 TCCTCGTGGACGGCAACGTGACCAACATCACCACCGTCAGCCTCTGGGAAGAATTCTCTCCAGCGACCT
 CGCAGATCTCCGCTTCTTGACATGAGCCAGAACCAGTTCCAGTACCTGCCAGACGGCTTCTGAGGAAA
 ATGCCTTCCCTCTCCACCTGAACCTCCACCAGAATTGCCTGATGACGCTTACATTTCGGGAGCAGGAGC
 CCCCCGAGCGCTCACCGAGCTGGACCTGAGCCACAACCAGCTGTCGGAGCTGCACCTGGCTCCGGGGCT
 GGCCAGCTGCCTGGGCAGCCTGCGCTTGTCAACCTGAGCTCCAACCAGCTCCTGGGCGTCCCCCTGGC
 CTCTTCGCCAATGCTAGGAACATCACTACACTTGACATGAGCCACAATCAGATCTCACTTTGTCCCTGC
 CAGCTGCCTCGGACCGGGTGGGCCCCCTAGCTGTGTGGATTTAGGAATATGGCATCTTTAAGGAGCCT
 GTCTCTGGAGGGCTGTGGCTGGGGCATTGCCAGACTGCCCATTCCAAGGGACCTCCCTGACCTACTTA
 GACCTCTCAAGCAACTGGGGGTTCTGAATGGGAGCCTCGCCCCACTCCAGGATGTTGCCCCATGTTAC
 AGGTCTGTCTCTCAGGAACATGGGCTCCACTCCAGCTTATGGCGTTGGACTTCTCTGGGTTTGGGAA
 TCTCAGGGAATTAGATCTGTGCGGAATTGCTTGACCACCTTCCAAGGTTTGGGGCAGCCTGGCCCTG
 GAGACCCTGGATCTCCGTAGAACTCGCTCACAGCCCTTCCCCAGAAGGCTGTGTCTGAGCAGCTCTCGA
 GAGGTCTGCGGACCATCTACCTCAGTCAGAATCCATATGACTGCTGTGGGTGGATGGCTGGGGGGCCT
 GCAGCATGGGCAGACGGTGGCCGACTGGCCATGGTCACCTGCAACCTCTCTCCAAGATCATCCGCGTG
 ACGGAGCTGCCCGGAGGTGTGCCTCGGGACTGCAAGTGGGAGCGGCTGGACCTGGGCCTGCTCTACCTCG
 TGCTCATCTCTCCAGCTGCCTCACCCTGCTGGTGGCTGCACTGTATCGTCTCACTTTTAAGAAGCC
 TCTGCTTCAGGTCAAGAGCCGCTGCCACTGGTCTCCGTTTAC

ACGCGTACGCGGCGGCTCGAG – GFP Tag – GTTTAA

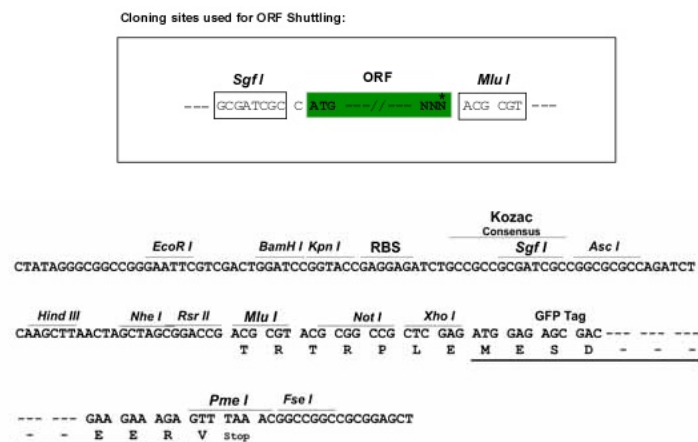
Protein Sequence: >RG208170 representing NM_198565
 Red=Cloning site Green=Tags(s)

MELLPLWLCLGFHFLTVGWRNRSGTATAASQGVCKLVGGAADCRGQSLASVPSSLPHPHARMLTLDANPLK
 TLWNHSLQPYLLESLSLHSCHLERISRGAFQEQHLRSLVLGDNCLSENYEETAAALHALPGLRRDL
 GNALTEDMAALMLQNLSSLRVSLAGNTIMRLDDSVFEGLERLRELDLQRNYIFEIEGGAFDGLAELRHL
 NLAFFNNLPCIVDFGLTRLRVLNVSYNVLEWFLATGGEAAFELETDL SHNQLLFFPLLPQYSKLRLLLLR
 DNNMGFYRDLYNTSSPREMVAQFLLVDGNVTNITTVSLWEEFSSSDLADLRFLDMSQNQFQYLPDGFLRK
 MPSSLHLNLHQNCLMTLHIREHEPPGALTELDL SHNQLSELHLAPGLASCLGSLRLFNLSNQLLGVP
 LFANARNITTLDMSHNQISLCPLPAASDRVGPSCVDFRNMASLRSLSLEGCGLGALPDCPFQGTSLTYL
 DLSSNWGVLNGLAPLQDVAPMLQVLSLRNMGHSSFMALDFSGFNLRLDL SGNCLTTFPRFGGSLAL
 ETDLRRNSLTALPQKAVSEQLSRGLRTIYLSQNPYDCCGVDGWGALQHGGTVADWAMVTCNLSSKIIRV
 TELPGGVPRDCKWERLDLGLLYVLILPSCLTLLVACTIVLTFKKPLLQVIKSRCHWSSVY

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_198565

ORF Size: 2076 bp

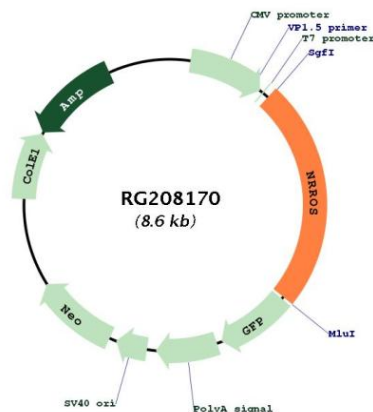
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<u>NM_198565.1, NP_940967.1</u>
RefSeq Size:	2488 bp
RefSeq ORF:	2079 bp
Locus ID:	375387
UniProt ID:	<u>Q86YC3</u>
Cytogenetics:	3q29
Protein Families:	Transmembrane
Gene Summary:	Key regulator of transforming growth factor beta-1 (TGFB1) specifically required for microglia function in the nervous system (By similarity). Required for activation of latent TGF-beta-1 in macrophages and microglia: associates specifically via disulfide bonds with the Latency-associated peptide (LAP), which is the regulatory chain of TGFB1, and regulates integrin-dependent activation of TGF-beta-1 (By similarity). TGF-beta-1 activation mediated by LRRC33/NRROS is highly localized: there is little spreading of TGF-beta-1 activated from one microglial cell to neighboring microglia, suggesting the existence of localized and selective activation of TGF-beta-1 by LRRC33/NRROS (By similarity). Indirectly plays a role in Toll-like receptor (TLR) signaling; ability to inhibit TLR-mediated NF-kappa-B activation and cytokine production is probably a consequence of its role in TGF-beta-1 signaling (PubMed:23545260). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG208170