

## Product datasheet for **RC208170**

### **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:	Myc-DDK
Symbol:	LRRC33
Synonyms:	ELLP3030; GARPL1; LRRC33; SENEAC; UNQ3030
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RC208170 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGTTGCTGCCTCTTTGGCTCTGCCTGGGTTTTCACTTCCTGACCGTGGGCTGGAGGAACAGAAGCG  
 GAACAGCCACAGCAGCCTCCCAAGGAGTCTGCAAGTTGGTGGGTGGAGCCGCTGACTGCCGAGGGCAGAG  
 CCTCGTTTCGGTCCCGCAGCAGCCTCCCGCCCCACGCCCGGATGCTCACCTGGATGCCAACCTCTCAAG  
 ACCCTGTGGAATCACTCCCTCCAGCCTTACCCTCTCCTGGAGAGCCTCAGCCTGCACAGCTGCCACCTGG  
 AGCGCATCAGCCGCGGCCCTTCCAGGAGCAAGGTCACCTGCGCAGCCTGGTACTGGGGACAACCTGCCT  
 CTCAGAGAACTACGAAGAGACGGCAGCCGCCCTCCAGCCCTGCCGGCCTGCGGAGGCTGGACTTGCA  
 GGAACGCCCTGACGGAGGACATGGCAGCGCTCATGCTCCAGAACCTCTCCTCGTGGTCCGTGTCCC  
 TGGCGGGGAACACCATCATGCGGCTGGACGACTCCGTCTTCGAGGGCCTGGAGCGTCTCCGGGAGCTGGA  
 TCTGCAGAGGAACATCTTCGAGATCGAGGGCGCGCTTCGACGGCCTGGCTGAGCTGAGGCACCTC  
 AACCTGGCCTTCAACAACCTCCCCTGCATCGTGGACTTCGGGCTCACGGCCTGCCGGTCCCAACGTC  
 GCTACAACGCTCCTGGAGTGGTTCCTCGCAGCCGGGGAGAGGCTGCCTTCGAGCTGGAGACGCTGGACCT  
 GTCTACAACAGCTGCTGTTCTTCCCGCTGCTGCCCCAGTACAGCAAGTTGCGGACCCTCCTGCTGCGC  
 GACAACAACATGGGCTTCTACCGGGACCTGTACAACACCTCGTCGCCGAGGGAGATGGTGGCCAGTTCC  
 TCCTCGTGGACGGCAACGTGACCAACATCACCACCGTCAGCCTCTGGGAAGAATTCTCCTCCAGCGACCT  
 CGCAGATCTCCGTTCTGGACATGAGCCAGAACCAGTTCAGTACCTGCCAGACGGCTTCTGAGGAAA  
 ATGCCTTCCCTCTCCACCTGAACCTCCACCAGAATTGCCTGATGACGCTTACATTTCGGGAGCAGGAGC  
 CCCCCGGAGCGCTCACCGAGCTGGACCTGAGCCACAACCAGCTGTCGGAGCTGCACCTGGCTCCGGGGCT  
 GGCCAGCTGCCTGGCAGCCTGCGCTTGTCAACCTGAGCTCCAACCAGCTCCTGGGCGTCCCCCTGGC  
 CTCTTCGCAATGCTAGGAACATCACTACACTTGACATGAGCCACAATCAGATCTCACTTTGTCCCCTGC  
 CAGCTGCCTCGGACCGGGTGGGCCCCCTAGCTGTGTGGATTCAGGAATATGGCATCTTAAAGGAGCT  
 GTCTGAGGGGCTGTGGCCTGGGGCATTGCCAGACTGCCATTCCAAGGGACCTCCCTGACCTACTTA  
 GACCTCTAAGCAACTGGGGGTCTGAATGGGAGCCTCGCCCCACTCCAGGATGTTGCCCCATGTTAC  
 AGGTCCTGTCTCAGGAACATGGGCTCCACTCCAGCTTATGGCGTTGGACTTCTCTGGGTTTGGGAA  
 TCTCAGGGACTTAGATCTGTGGGAATTGCTTGACCACCTTCCAAGGTTTGGGGCAGCCTGGCCCTG  
 GAGACCCTGGATCTCCGTAGAACTCGCTCACAGCCCTTCCCAGAAGGCTGTGTCTGAGCAGCTCTCGA  
 GAGGCTCGCGGACCATCTACCTCAGTCAGAATCCAATGACTGCTGTGGGTGGATGGCTGGGGGGCCCT  
 GCAGCATGGGCAGACGGTGGCCGACTGGCCATGGTCACCTGCAACCTCTCCTCCAAGATCATCCGCGTG  
 ACGGAGCTGCCCGGAGGTGTGCCTCGGGACTGCAAGTGGGAGCGGCTGGACCTGGGCCTGCTTACCTCG  
 TGCTCATCTCCCGAGCTGCCTCACCTGCTGGTGGCTGCACTGTCTCATCGTCTCACTTTAAGAAGCC  
 TCTGCTCAGGTCATCAAGAGCCGCTGCCACTGGTCTCCGTTTAC

**ACGCGT**ACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208170 protein sequence  
 Red=Cloning site Green=Tags(s)

MELLPLWLC LGFHFLTVGWRNRSGTATAASQGVCKLVGGAADCRGQSLASVPSSLP PHARMLTLDANPLK  
 TLWNHSLQPYLLESLHLSCHLERISRGAFQEQGHLRSLVLGDNCLSENYEETAALHALPGLRRDLDS  
 GNALTEDMAALMLQNLSSLRSVSLAGNTIMRLDSDVFEGLERLRELDLQRNYIFEIEGGAFDGLAELRHL  
 NLA FNNLPCIVDFGLTRLRVLNVSYNVLEWFLATGGEAAFELETDL SHNQLLFFPLL PQYSKLR TLLLR  
 DNNMGFYRDLYNTSSPREMVAQFLLVDGNVTNITTVSLWEEFSSSDLADLRFLDMSQNQFQYLPDGFLRK  
 MP SL SHLNLHQNCLMTLHIREHEPPGALTELDL SHNQLSELHLAPGLASCLGSLRFLNLSNQLLGVPPG  
 LFANARNITTLDM SHNQLSICPLPAASDRVGPSPCVDFRNMA SLRSLSLEGCGLGALPDCPFQGTSLTYL  
 DLSSNWGVLNGLAPLQDVAPMLQVLSLRNMG LHSSFMALDFSGFNL RDLDL SGNCLTTFPRFGGSLAL  
 ETLDLRRNSLTALPQKAVSEQLSRGLRTIYL SQNPYDCCGV DGGWALQHGQTVADWAMVTCNLSSKIIRV  
 TELPGGVPRDCKWERLDLGLLYLVLILPSCLTLLVACTVIVLTFKKPLLQVIKSRCHWSSVY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6693\\_b06.zip](https://cdn.origene.com/chromatograms/mk6693_b06.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_198565

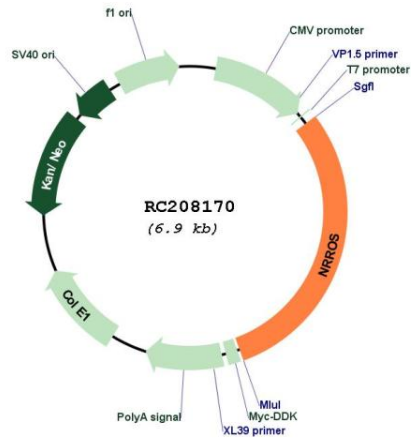
ORF Size: 2076 bp

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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_198565.1</a></u> , <u><a href="#">NP_940967.1</a></u>
<b>RefSeq Size:</b>	2488 bp
<b>RefSeq ORF:</b>	2079 bp
<b>Locus ID:</b>	375387
<b>UniProt ID:</b>	<u><a href="#">Q86YC3</a></u>
<b>Cytogenetics:</b>	3q29
<b>Protein Families:</b>	Transmembrane
<b>MW:</b>	76.4 kDa
<b>Gene Summary:</b>	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 RC208170