

Product datasheet for **MG224235**

Nrros (NM_146069) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nrros (NM_146069) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nrros
Synonyms:	E430025L02Rik; Lrcc33; Lrrc33
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>MG224235 representing NM_146069
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCAGGAGCCTTTGGAGACTGGAAGCATTGAATCCTCTGGAAGTGGCAATGTTGTTGTGAGCCACCAGA
 GAGCTGTGCCTGAGATGGAGTTCCCGCCCTCTGGCTTTGCCTGGGTTTTCACTTCTTGATTGTGGAATG
 GAGGAGCGGACCTGGGACAGCCACTGCAGCTTCCCAAGGAGGCTGCAAGGTGGTCGACGGAGTCGCTGAC
 TGCCGGGGTCTGAACCTTGCTTCGGTACCCAGCAGCCTCCACCCCATTCCTGGATGCTCATTCTGGATG
 CTAACCTCTCAAGGACCTGTGGAACATTCCCTCCAGGCCTACCCACGCCTGGAGAACCTCAGCCTGCA
 TAGCTGTACCTGGACCTATCAGCCACTACGCCTTCGAGAGCAAGGCCACTTACGCAACCTGTTCTG
 GCAGACAACCGCCTCTCGGAGAACTACAAGGAGTCAGCCGAGCACTCCACACCTGCTGGGACTTCGGA
 GACTGGACTTGTCTGAAACTCCCTGACCGAAGACATGGCGGCTCTCATGCTTCAGAACCTCTCCTCGTT
 GGAGGTTGTCTTGGCAAGGAATACCTCATGAGGCTCGACGACTCTATCTTTGAGGGCTGGAACAC
 CTTGTAGAGCTAGATTTGCAGAGAACTACATCTTTGAGATCGAGGGCGGGCGTTTGACGGCTTACTG
 AGCTGAGGCGTCTCAACCTTGCTTATAACAACCTCCCCTGCATTGTGGACTTCAGCCTCACCCAGTTACG
 GTTCTCAACGTCACTTATAACATCCTAGAGTGGTTCTTGGCAGCCAGGAGGAGGTGGCCTTCGAATTG
 GAGATACTGGACCTGTCTCACAACAGCTGCTCTTCTCCCACTTTCCTCAGTCGCGCAAGCTGCACA
 CCCTCTGCTCCAGGACAACAACATGGGCTTCTACAGGGAGCTTTACAACACCTCCTCCCGCAGGAGAT
 GGTGGCCAGTTCTTCTTGTGGACGGCAATGTGACTAACATCACAACGTCAACCTCTGGGAGGAGTTT
 TCCTCCAGCGACCTGTGAGCTCTTCGCTTCCTGGACATGAGCCAAAACAGTTCCGGCACTTGCCGGATG
 GTTTCCTGAAGAAGACACCTTCCCTTTCCCACTGAACCTCAACCAGAACTGCCTGAAGATGCTCCACAT
 CCGGGAGCACGAGCCGCCGGGAGCACTACCGAGCTGGATCTGAGCCACAACAGTTGGCAGAGCTGCAC
 CTGGCTCCGGGGCTCACGGGCTCCCTCAGGAACCTCCGGGTGTTCAACCTGAGTTCCAACAGCTCCTGG
 GGGTCCCACTGGCCTTTTCGACAATGCCAGCAGCATCACTACAATCGACATGAGTCACAATCAGATCTC
 ACTTTGCTCAGATGGTGCCGTAGACTGGGAGGGGCTCCCACTTGTGTGGATTTAGAAACATGGGC
 TCTTTGAGGAGCCTTCTCTGGACGGCTGTGGGCTGAAGGCATTACAAGACTGCCGTTCCAGGGGACCT
 CCCTCACTCATTTAGACCTGTCTAGCAACTGGGGGTTCTGAATGGGAGCATCAGCCCTCTCTGGGCTGT
 TGCCCCGACATTACAGGTCTGTCTCTCAGGGACGTGGGCCTTGGTTCTGGCGCTGCAGAGATGGACTTC
 TCTGCTTTGGGAATCTCGGGCGTTGGATCTGTGCGGAACTCCCTGACCAGCTTCCCAAAGTTCAAGG
 GCAGTTTGGCCCTTCGGACTCTCGACCTCCGAGAACTCTCTACGGCCCTCCCTCAGAGGGTTGTGTC
 CGAGCAGCCTCTGAGGGGTCTGCAGACCATCTACCTCAGCCAGAACCTTATGACTGCTGTGGGGTGGAA
 GGATGGGGGGCCCTGCAGCAGCACTTCAAGACTGTTGCGGACTTGTCCATGGTCACTTGCAACCTCTCTT
 CCAAGATCGTCCGTGTGGTGGAGCTGCCGAAGGCCTGCCTCAGGGCTGTAAGTGGGAACAGGTGGACAC
 TGGTCTCTTCTACCTCGTCTCATCCTGCCCAGCTGCCTCACCCTGCTGGTGGCCTGTACTGTCGCTTTC
 CTCACCTTTTAAGAAGCCTTTGCTTCAGGTCACTAAGAGCCGCTGCCACTGGTCTCCATATAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG224235 representing NM_146069
 Red=Cloning site Green=Tags(s)

MQEPLTGSIESSTGNVVVSHQRAVPEMEFPPLWLCLGFHFLIVEWRSGPGTATAASQGGCKVVDGVAD
 CRGLNLASVPSSLPPhSRMLILDANPLKDLWNHSLQAYPRLNLSLHSCHLDRISHYAFREQGHLRNLVL
 ADNRLSENYKESAAALHTLLGLRRDLSGNSLTEDMAALMLQNLSSLEVSLARNTLMRLDDSI FEGLEH
 LVELDLQRNYIFEIEGGAFDGLTELRRNLAYNNLPCIVDFSLTQLRFLNVSYNILEWFLAAREEVAFEL
 EILDLSHNQLLFFPLLQCGKLTLLQLDNNMGFYREL YNTSSPQEMVAQFLLVDGNVTNITTVNLWEEF
 SSSDL SALRFLDMSQNQFRHLPDGF LKKTPSLSHLNLNQNLKMLHIREHEPPGALTELDLSHNQLAELH
 LAPGLTGLRNLRVFNLSSNQLLGVP TGLFDNASSITTIDMSHNQISLCPQMPVPDWEPPSCVDFRNMG
 SLRSLSLDGCGLKALQDCPFQGTSLTHLDLSSNWGV LSGISPLWAVAPTQVLSLRDVLGSGAAEMDF
 SAFGNLRALDLSGNSLTSPKFKGSLALRTDLRRNSLTALPQRVVSEQPLRGLQTIYLSQNPYDCCGVE
 GWGALQQHFKTVDLSMVTCLSSKIVRVVELPEGLPQGCKWEQVDTGLFYLVILPSCLTLLVACTVVF
 LTFKKPLLQVIKSRCHWSSIY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_146069

ORF Size: 2163 bp

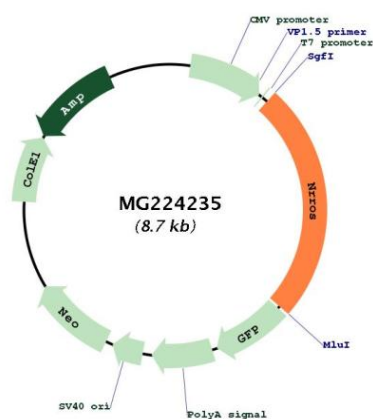
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_146069.4, NP_666181.2</u>
RefSeq Size:	3559 bp
RefSeq ORF:	2082 bp
Locus ID:	224109
UniProt ID:	<u>Q8BMT4</u>
Cytogenetics:	16 B2
Gene Summary:	Key regulator of transforming growth factor beta-1 (TGFB1) specifically required for microglia function in the nervous system (PubMed:29909984). 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 (PubMed:29909984). 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 (PubMed:29909984). 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 (Probable).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG224235