

Product datasheet for **MG208964**

Nprl3 (NM_181569) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nprl3 (NM_181569) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nprl3
Synonyms:	Aag; CGTHBA; HS-26; HS-40; m(alpha)RE; Mare; Phg; Prox1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208964 representing NM_181569
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGACAATACCAGCCCATCAGCGTGATCCTGGTGAGCTCGGGCAGCAGGGCAATAAGCTGCTCT
 TCAGGTACCCCTTCCAGAGGAGCCAGGAGCACCCCGCTCCAGACAAATAAACCACGGAGCAGATATGC
 TGCAACAACACTGGCGAACATGCTGATGACCAGGACGGTGACTCCAGGTTCTCGGATGTTATTCTGGCA
 ACAATTTTGGCAACAACTCTGAAATGTGCGGCCAAAAATTTGAACTGAAGATTGATAATGTACGGTTTG
 TTGGGCACCCAACACTGCTGCAGCATGCTCTGGGGCAGGTCTCCAAAACAGATCCATCTCCAAAGCGGGA
 AGCTCCGACCATGATTCTTTTTAACGTGGTATTTGCACTGAGGGCCAATGCTGATCCATCAGTGATAAAC
 TGTCTACACAACCTGTCCCGCGAATTGCTACTGTCTGCAGCATGAGGAGCGCCGCTGCCAGTACCTCA
 CTCGAGAGGCCAAGCTGATCCTAGCACTCAGGATGAGGTGTCTGCTATGGCTGATGCAATGAAGTCC
 TCAGTCCCATTCCAGCACATCCTACCCAAGTGAAGCTGGCTCGGGACCTCAAAGAAGCTTATGACAGC
 CTGTGCACATCTGGTGTGGTACGGCTTCACATTAACAGCTGGCTGGAAGTGAGTTTCTGTCTGCCCCACA
 AGATCCACTATGCAGCTCAAGTCTGATTCCTCCTGAGGCTATTGAACGGAGCCTGAAAGCCATCCGCC
 GTACCATGCCTTGTACTTCTCAGTGACGAGAAGTCTCTGCTGAGTGAGCTTCCCATTGACTGCTCCCG
 GCTCTGGTGCGGGTGATCAAGACCACGTCTGCTGTGAAGAACCTGCAGCAGTAGCCAGGATGCCGATC
 TGGCCTTGTGCAAGTCTCCAGTTGGCAGCTCACCTGGTATACTGGGGCAAGGCTGTCATCATCTACCC
 ACTGTGTGAGAACAACGTCTATGTCATGCTCCAATGCCAGTGTGTGTCTGTACTCCCCGCTAGCTGAA
 CAGTTCTCCCGCAGTTCCTCCATGACCTGCCATCTGTCTGGCCAAGTTTTCTTGCCTGTTTCTT
 TATCGGAGTTCAGGAGCCCTCTGGTCCCCTGCACAGGAGACCAGCTCATCCAGATGGTGGTGGAT
 GCTGCAGCGCCGCTCCTCATCCAGCTGCATACCTATGTTTGCCTAATGGCCTCACCCAGCGAAGAGGAG
 CCCCAGCTGCGAGAGGATGATGTCCCTTACAGCCAGAGTTGGTGGCCGAGCCTCAGCACACCCAATG
 CTCTAAGCTTTGGCTCCCAACCAGCAGTGACGACATGACCTTACCAGCCCAGTATGGACAACCTCAAG
 TGCTGAGCTGCTCCCGAGTGGGGACTCACCAGTGAACAAGAGGATGACAGAGAACCTGCTGGCTAGCCTC
 TCAGAGCATGAGCGGGTCTATCCTCAATGTGCTGCAGCCAAAACCTGAGGACCTCCGCATGTTTG
 CCAGGCTCCTTCACTACTCCGTGGCCGCCACCATCTGGAGGAGATCATGTACAATGAGAACAACCTCGGC
 CTCCAGCTACTCATGCTCTTTGACAAATCCGCAGTGTGCTGGTGGTGACCACCATGAGGACCCTGTT
 ATTGCCGTCTTCCAGGCACTGTCACA

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG208964 representing NM_181569
 Red=Cloning site Green=Tags(s)

MGDNTSPISVILVSSGSRGNKLLFRYPFQRSQEHASQTNKPRSRVAVNNTGEHADDQDGSRFSVDVILA
 TILATKSEMCGQKFKELKIDNRFVGHPTLLQHALGQVSKTDPSPKREAPTMILFNVVFALRANADPSVIN
 CLHNLRRRIATVLQHEERRCQYL TREAKLILALQDEVSAMADANEGPQSPFQHILPKCKLARDLKEAYDS
 LCTSGVRLHINSWLEVSFCLPHKIHYAASSLIPPEAIERSLKAIRPYHALLLL SDEKSLSELPIDCSP
 ALVRVIKTTSAVKNLQQLAQDADLALLQVFQLAHLVYWGKAVIIYPLCENNVYVMPNASVCLYSPLAE
 QFSRQFPSHDLPSVLAKFSLPVSLSEFRSPLAPPAQETQLIQMVVWMLQRRLLIQLHTYVCLMASPSEE
 PRLREDDVPFTARVGGSLSTPNALSFGSPTSSDDMTL TSPSMDNSSAELLPSGDSPLNKRMTENLLASL
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 IAVFQALLT

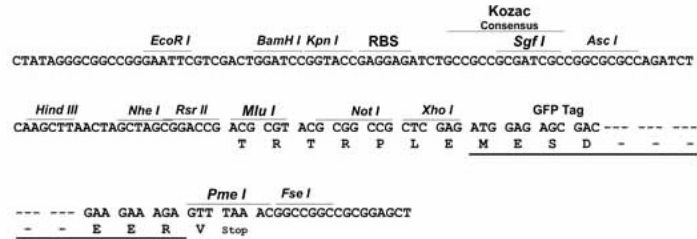
TRTRPLE - GFP Tag - V

Restriction Sites:

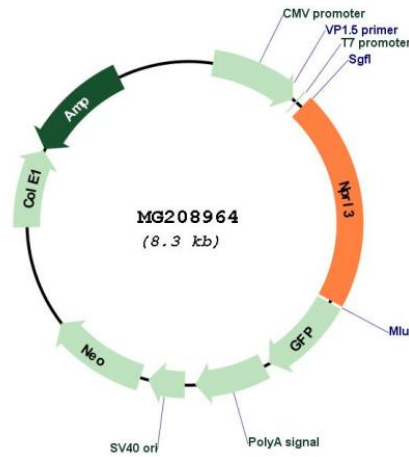
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_181569
 ORF Size: 1707 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:	<ol style="list-style-type: none">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_181569.3 , NP_853547.1
RefSeq Size:	2316 bp
RefSeq ORF:	1710 bp
Locus ID:	17168
UniProt ID:	Q8VIJ8
Cytogenetics:	11 18.83 cM
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]