

Product datasheet for **MR230584**

Nprl3 (NM_001284359) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nprl3 (NM_001284359) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nprl3
Synonyms:	Aag; CGTHBA; HS-26; HS-40; m(alpha)RE; Mare; Phg; Prox1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR230584 representing NM_001284359
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGGGACAATACCAGCCCATCAGCGTGATCCTGGTGAGCTCGGGCAGCAGGGCAATAAGCTGCTCT
 TCAGGTACCCCTTCCAGAGGAGCCAGGAGCACCCCGCTCCAGACAAATAAACCACGGAGCAGATATGC
 TGCAACAACACTGGCGAACATGCTGATGACCAGGACGGTGACTCCAGCAAGCCATGTCCTCCAACCGAT
 GAGCAATTGGTTGCAGGGTTCTCGGATGTTATTCTGGCAACAATTTGGCAACCAAACTGAAATGTGCG
 GCCAAAAATTTGAACTGAAGATTGATAATGTACGGTTTGTGGGCACCAACTGCTGCAGCATGCTCT
 GGGGCAGTCTCCAAAACAGATCCATCTCAAAGCGGGAAGCTCCGACCATGATTCTTTTAACTGGTA
 TTTGCACTGAGGGCAATGCTGATCCATCAGTGATAAACTGTCTACACAATTGTCCCGCGAATTGCTA
 CTGTCTGCAGCATGAGGAGCGCCGCTGCCAGTACCTCACTCGAGAGGCCAAGCTGATCCTAGCACTTCA
 GGATGAGGTGCTGCTATGGCTGATGCAATGAAGGTCTCAGTCCCCATTCCAGCACATCTACCCAAG
 TGCAAGCTGGCTCGGGACCTCAAAGAAGCTTATGACAGCCTGTGCACATCTGGTGTGGTACGGCTTACA
 TTAACAGCTGGCTGGAAGTGAGTTTCTGTCTGCCCCACAAGATCCACTATGCAGCTTCAAGTCTGATTCC
 TCCTGAGGCTATTGAACGGAGCCTGAAAGCCATCCGCCGTACCATGCCTTGCTACTTCTCAGTGACGAG
 AAGTCTCTGCTGAGTGAGCTTCCATTGACTGCTCCCGGCTCTGGTGCGGGTGATCAAGACCACGCTCTG
 CTGTGAAGAACCTGCAGCAGCTAGCCCAGGATGCCGATCTGGCCTTGCTGCAGGTCTTCCAGTTGGCAGC
 TCACCTGGTATACTGGGGCAAGGCTGTCATCATCTACCACTGTGTGAGAACAACGCTATGTGATGTCT
 CCCAATGCCAGTGTGTCTGTACTCCCGCTAGCTGAACAGTTCTCCCGCAGTCCCGTCCCATGACC
 TGCCATCTGTCTGGCCAAGTTTCTTGCCTGTTTCTTTATCGGAGTTCAGGAGCCCTTGCTGCCCTCCC
 TGCACAGGAGACCCAGCTCATCCAGATGGTGTGGATGCTGCAGCGCCGCTCCTCATCCAGCTGCAT
 ACCTATGTTTGCCTAATGGCCTCACCCAGCGAAGAGGAGCCCGACTGCGAGAGGATGATGTCCCCTTCA
 CAGCCAGAGTTGGTGGCCGACGCTCAGCACACCCAATGCTCTAAGCTTTGGCTCCCAACCAGCAGTGA
 CGACATGACCCTTACCAGCCCAGTATGGACAACCAAGTGCTGAGCTGCTCCCAAGTGGGGACTCACCA
 CTGAACAAGAGGATGACAGAGAACCTGCTGGCTAGCCTCTCAGAGCATGAGCGGGCTGCTATCCTCAATG
 TGCTGCAGCCCCAACCCCTGAGGACCTCCGATGTTTGGCAGGCTCCTCACTACTTCCGTGGCCGCCA
 CCATCTGGAGGAGATCATGTACAATGAGAACACTCGGCGCTCCAGCTACTCATGCTCTTTGACAAATTC
 CGCAGTGTCTGGTGGTACCACCCATGAGGACCTGTTATTGCCGTCTCCAGGCACTGCTCACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230584 representing NM_001284359
 Red=Cloning site Green=Tags(s)

MGDNTSPISVILVSSGRGNKLLFRYPFQRSQEHASQTNKPRSRVAVNNTGEHADDQDGDSSKPCPPTD
 EQLVAGFSDVILATILATKSEMCGQKFKIDNVRVFGHPTLLQHALGQVSKTDPSPKREAPTMILFNVV
 FALRANADPSVINCLHNLRRRIATVLQHEERRCQYL TREAKLILALQDEVSAMADANEGPQSPFQHILPK
 CKLARDLKEAYDSLCTSGVVRLHINSWLEVSFCLPHKIHYAASSLIPPEAIERSLKAIRPYHALLLL SDE
 KSLLELSPIDCSPALVRVIKTTSAVKNLQQLAQDADLALLQVFLAAHLVYWGKAVIYPLCENNVVMS
 PNASVCLYSPLAEQFSRQFP SHDLPSVLAKFSLPVSLSEFRSPLAPPAQETQLIQMVVWMLQRLLIQLH
 TYVCLMASPSEEEPRLREDDVPFTARVGG RSLSTPNALSFGSPTSSDDMTLTPSPMDNSSAELLPSG DSP
 LNKRMENLLASLSEHERAAILNVPAAQNPEDLRMFARLLHYFRGRHLEEIIMYNENTRRSQLLMLFDKF
 RSVLVVTTHEDPVIAVFQALLT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001284359

ORF Size: 1746 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

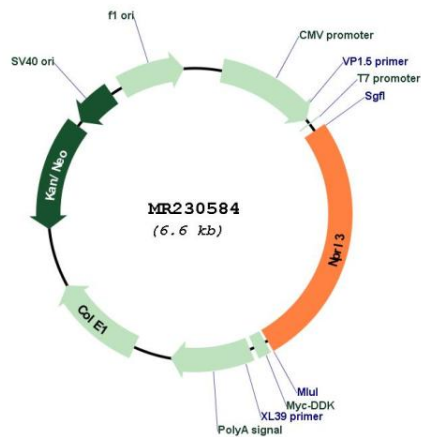
Reconstitution Method:

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: [NM_001284359.1](#), [NP_001271288.1](#)
RefSeq Size: 2904 bp
RefSeq ORF: 1749 bp
Locus ID: 17168
UniProt ID: [Q8VIJ8](#)
Cytogenetics: 11 18.83 cM
MW: 65.3 kDa

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 MR230584