

## Product datasheet for **MC227484**

### **Nlrc3 (NM\_175547) Mouse Untagged Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Nlrc3 (NM\_175547) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Nlrc3  
**Synonyms:** CLR16.2; D230007K08Rik; mFLJ00348  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC227484 representing NM\_175547  
**Red**=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGCAGGAAGCCTGGCTGAGAATCAGATTGGTAACAAAGGAGCCAAAGCCCTGGCCAGATCCCTCCTGG  
TTAACAGAAGCCTCATCACACTGGACCTCCGGAGTAACAGCATTGGACCACCGGGGGCTAAGGCTTTGGC  
CGATGCTCTGAAGATAAACCGAAGCCTAACTTCTCTAAGCCTCCAAAGCAACGTGATCAAGGATGACGGT  
GTATGTGCGTGGCTGAGGCCCTGGTCTCCAACAGACCATCTCCATGCTACAGCTACAGAAGAACTTAA  
TTGGGCTCATAGGAGCCAGCAGATGGCAGATGCCCTGAAGCAGAACAGGAGCCTGAAAGCACTCATGTT  
TTCCAGTAATACCATTGGCGACAGAGGTGCCATAGCCCTGGCTGAGGCCCTGAAGGTGAACCAGATCCTG  
GAGAACTTAGACCTACAGAGCAATTCCATCAGTGACATGGGAGTGACGGTGTGATGCGAGCCCTCTGCA  
GTAACCAGACACTCTCCAGTCTCAACCTGCGAGAAAACCTCCATCAGCCCAGAGGGAGCCAGGCCCTCAC  
TCAAGCTCTCTGCAGGAACAACACTCTGAAGCACTTGGACCTGACAGCTAATCTCCTCCATGACCGAGGT  
GCCCAGGCCATTGCAGTAGCTGTGGGAGAAAACCACTCCCTCACACACCTTCACTGCAGTGAACACTTCA  
TCCAAGTGGTGGGCCAGGGCCCTGGGACAAGCACTCCAGTGAACAGAACCCCTGACAACCTTAGACTT  
ACAGGAGAATGCCATAGGGGATGAAGGAGCTTCTCAGTGGCTGGCGCACTGAAGGTGAACACAACCCCTC  
ATTGCTCTCTACCTACAGGTGGCCTCCATTGGTAGCCAAGGGGCCAGGCACTTGGGGAGGCCCTCACTG  
TGAACAGAACCTTGGAGATTCTTGACTTACGAGGAAACGACGTTGGGGCAGCTGGAGCCAAGGCCTTGGC  
AAATGCTTTAAAGTTAACTCCAGTCTCCGAAGACTCAATCTCCAGGAGAACTCACTGGGGATGGATGGG  
GCCATATTTGTTGCCTCTGCACTGTCTGAGAACCAGGTCTGCACCATATTAATCTCCAGGGGAATCCCA  
TTGGGGAGTCTGCTGCCAGGATGATCTCAGAGGCCATCAAGACAAACGCTCCACATGCACTGTGGAAT  
**ATAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



<b>Restriction Sites:</b>	Sgfl-Mlul
<b>ACCN:</b>	NM_175547
<b>Insert Size:</b>	1194 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<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_175547.3</a></u> , <u><a href="#">NP_780756.1</a></u>
<b>RefSeq Size:</b>	2003 bp
<b>RefSeq ORF:</b>	1194 bp
<b>Locus ID:</b>	268857
<b>UniProt ID:</b>	<u><a href="#">Q5DU56</a></u>
<b>Cytogenetics:</b>	16 A1

**Gene Summary:**

Negative regulator of the innate immune response. Attenuates signaling pathways activated by Toll-like receptors (TLRs) and the DNA sensor STING/TMEM173 in response to pathogen-associated molecular patterns, such as intracellular poly(dA:dT), but not poly(I:C), or in response to DNA virus infection, including that of Herpes simplex virus 1 (HSV1) (PubMed:22863753, PubMed:24560620). May affect TLR4 signaling by acting at the level of TRAF6 ubiquitination, decreasing the activating 'Lys-63'-linked ubiquitination and leaving unchanged the degradative 'Lys-48'-linked ubiquitination (PubMed:22863753). Inhibits the PI3K-AKT-mTOR pathway possibly by directly interacting with the phosphatidylinositol 3-kinase regulatory subunit p85 (PIK3R1/PIK3R2) and disrupting the association between PIK3R1/PIK3R2 and the catalytic subunit p110 (PIK3CA/PIK3CB/PIK3CD) and reducing PIK3R1/PIK3R2 activation. Via its regulation of the PI3K-AKT-mTOR pathway, controls cell proliferation, predominantly in intestinal epithelial cells (PubMed:27951586). May also affect NOD1- or NOD2-mediated NF-kappa-B activation (By similarity). Might also affect the inflammatory response by preventing NLRP3 inflammasome formation, CASP1 cleavage and IL1B maturation (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) lacks two alternate exons in the 5' coding region and uses an alternate downstream start codon compared to variant 1. It encodes isoform 2 which has a shorter and distinct N-terminus compared to isoform 1.