

## Product datasheet for MR224926

### Nlrc3 (NM\_001081280) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nlrc3 (NM_001081280) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nlrc3
Synonyms:	CLR16.2; D230007K08Rik; mFLJ00348
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR224926 representing NM_001081280 Red=Cloning site Blue=ORF Green=Tags(s)

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ATTCACCTGTCTCTGCAAGAATTTGTGGCAGCTACATATTACTATAGTGCATCCAAGAGGGCCATCTTTG  
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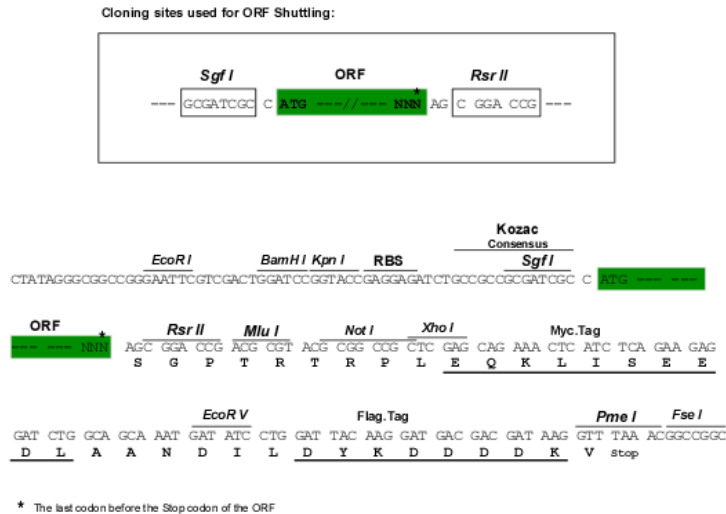
**Protein Sequence:**

>MR224926 representing NM\_001081280  
 Red=Cloning site Green=Tags(s)

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 LLAGKGSQLLQVRDKMPD SPLGSQSNESRIPKHSEALLSRVGNPELGSPSHRLASLMLVEGLTDLQLKE  
 HDFTQVEATR GVWHPARVITLDRLFLPLSRVSI PPRVSLTIGVAGVGKTLVRHFVHCWARGOVGKGF SR  
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 LGMDGAIFVASALSENHGLHHINLQGNPIGESAA RMISEAIKTNAPTCTVEI

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9049\\_e02.zip](https://cdn.origene.com/chromatograms/mm9049_e02.zip)  
**Restriction Sites:** SgfI-RsrII  
**Cloning Scheme:**



**ACCN:** NM\_001081280

**ORF Size:** 3306 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.

**RefSeq:** [NM\\_001081280.2](#)

**RefSeq Size:** 4080 bp

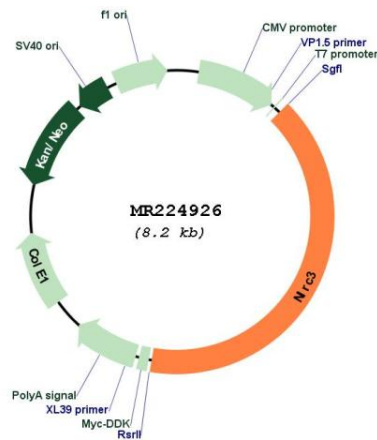
**RefSeq ORF:** 3309 bp

**Locus ID:** 268857

**Cytogenetics:** 16 A1  
**MW:** 120.3 kDa

**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]

**Product images:**



Circular map for MR224926