

Product datasheet for **MG224926**

Nlrc3 (NM_001081280) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nlrc3 (NM_001081280) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nlrc3
Synonyms:	CLR16.2; D230007K08Rik; mFLJ00348
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG224926 representing NM_001081280 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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GGCAGCCCTCACACCGGCTGGCCAGCCTCATGCTGGTGGAGGGCTGACAGACCTGCAGCTAAAGGAG
CATGACTTCACACAGGTGGAGGCCACGCGTGGGGTCTGGCACCTGCCAGAGTTATCACCTGGACAGGC
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CAAGACCAGCTAGTGAGGCATTTTGTTCATTGCTGGCCAGAGGACAGGTGGGCAAGGGCTTCTCACGG
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TCTTCTCAAGCATTGGGAAGCTAGTCTGGTGGCCACAGCCCAGACAGAGTCTCTGGTCTGGATGG
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CAGGTAGACCACCTGATCACTAACATCATCCGAGGCAACCTCTTCCAGAAATTTCTGTCTGGATCAC
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ATTCACCTGTCTCTGCAAGAATTTGTGGCAGCTACATATTACTATAGTGCATCCAAGAGGGCCATCTTTG
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 TCCAGGGGAATCCATTGGGGAGTCTGCTGCCAGGATGATCTCAGAGGCCATCAAGACAAAACGCTCCAC
 ATGCACTGTGAAATA

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG224926 representing NM_001081280
 Red=Cloning site Green=Tags(s)

MQAEPFSTLEQPPWQEGDNI GSPGVLALYSQLLAANTDSTRKQEVWTDRETCLAYSVGSPAQVQKALVD
 LLAGKGSQQLQVRDKMPD SPLGSQSNESRIPKHSEALLSRVGNPELGSPSHRLASLMLVEGLTDLQLKE
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 QVDHLITNIIRGNLFPEISVWITSRPSAAGQIPGGLVDRMTEIRGLTEEEIKVCLQMFPEEQNLLGOVL
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 GMTSPSHRTALAYLLQMSDIC SPEADFSLCLSQHVLQSLLPQLLYCQSLRLDNNQFQDPVMELLSVLSG
 KDCRIRKISLAENQIGNKGAKALARSLLVNRSLITLDRSNSIGPPGAKALADALKINRTL TSLSLQSNV
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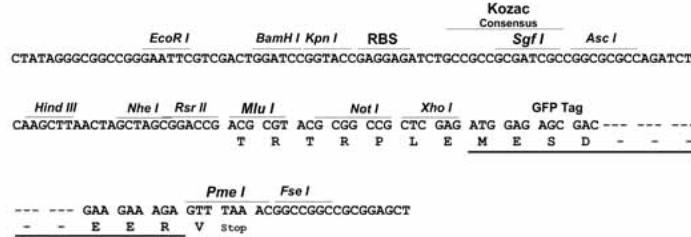
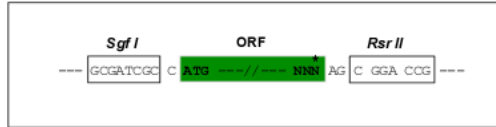
SGPTRRRLE - GFP Tag - V

Restriction Sites:

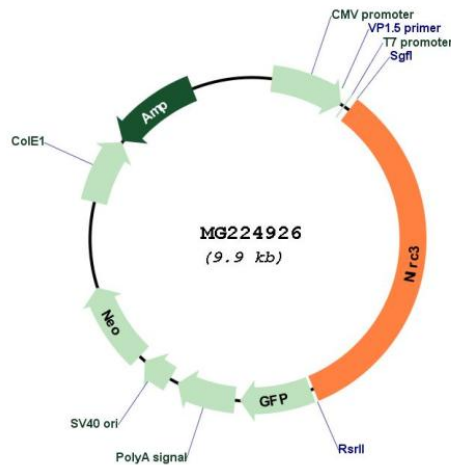
Sgfl-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



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:	<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:	<u>NM_001081280.2</u>
RefSeq Size:	4080 bp
RefSeq ORF:	3309 bp
Locus ID:	268857
Cytogenetics:	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]