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Product datasheet for MR229695

Nlrc3 (NM_175547) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nlrc3 (NM_175547) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nlrc3
Synonyms:	CLR16.2; D230007K08Rik; mFLJ00348
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR229695 representing NM_175547 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCAGGAAGCCTGGCTGAGAATCAGATTGGTAACAAAGGAGCCAAAGCCCTGGCCAGATCCCTCCTGG TTAACAGAAGCCTCATCACACTGGACCTCCGGAGTAACAGCATTGGACCACCGGGGGCTAAGGCTTTGGC CGATGCTCTGAAGATAAACCGAACGCTAACTTCTCTAAGCCTCCAAAGCAACGTGATCAAGGATGACGGT GTCATGTGCGTGGCTGAGGCCCTGGTCTCCAACCAGACCATCTCCATGCTACAGCTACAGAAGAACTTAA TTGGGCTCATAGGAGCCCAGCAGATGGCAGATGCCCTGAAGCAGAACAGGAGCCTGAAAGCACTCATGTT TTCCAGTAATACCATTGGCGACAGAGGTGCCATAGCCCTGGCTGAGGCCCTGAAGGTGAACCAGATCCTG GAGAACTTAGACCTACAGAGCAATTCCATCAGTGACATGGGAGTGACGGTGCTGATGCGAGCCCTCTGCA GTAACCAGACACTCTCCAGTCTCAACCTGCGAGAAAACTCCATCAGCCCAGAGGGAGCCCAGGCCCTCAC TCAAGCTCTCTGCAGGAACAACACTCTGAAGCACTTGGACCTGACAGCTAATCTCCTCCATGACCGAGGT GCCCAGGCCATTGCAGTAGCTGTGGGAGAAAACCACTCCCTCACACACCTTCACCTGCAGTGGAACTTCA TCCAAGCTGGTGCGGCCAGGGCCCTGGGACAAGCACTCCAGCTGAACAGAACCCTGACAACCTTAGACTT ACAGGAGAATGCCATAGGGGATGAAGGAGCTTCCTCAGTGGCTGGCGCACTGAAGGTGAACACAACCCTC ATTGCTCTCTACCTACAGGTGGCCTCCATTGGTAGCCAAGGGGCCCAGGCACTTGGGGAGGCCCTCACTG TGAACAGAACCTTGGAGATTCTTGACTTACGAGGAAACGACGTTGGGGCAGCTGGAGCCAAGGCCTTGGC AAATGCTTTAAAGTTAAACTCCAGTCTCCGAAGACTCAATCTCCAGGAGAACTCACTGGGGATGGATGGG GCCATATTTGTTGCCTCTGCACTGTCTGAGAACCACGGTCTGCACCATATTAATCTCCAGGGGAATCCCA TTGGGGAGTCTGCTGCCAGGATGATCTCAGAGGCCATCAAGACAAACGCTCCCACATGCACTGTGGAAAT A ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

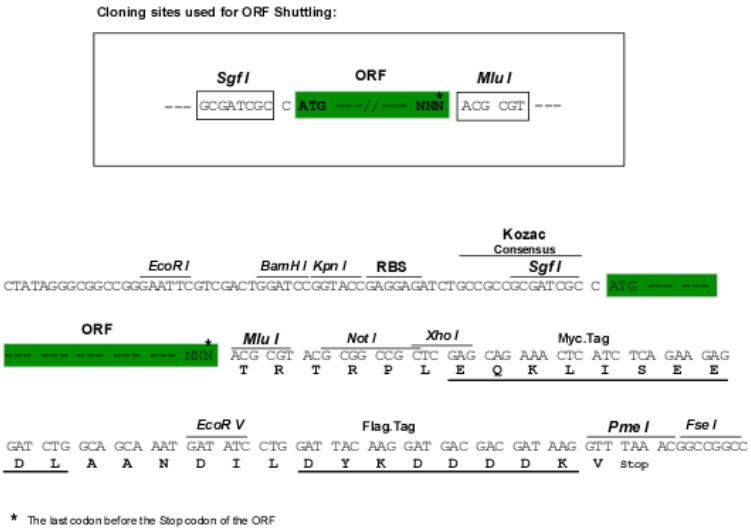
>MR229695 representing NM_175547
Red=Cloning site Green=Tags(s)

MAGSLAENQIGNKGAKALARSLLVNRSLITLDLRSNSIGPPGAKALADALKINRTLTSLSLQSNVIKDDG
VMCVAEALVSNQTISMLQLQKNLIGLIGAQQMADALKQNRSLKALMFSSNTIGDRGAIALAEALKVNQIL
ENLDLQSNSISDMGVTVLMRALCSNQTLSSLNLRENSISPEGAQALTQALCRNNTLKHLDLTANLLHDRG
AQAIAVAVGENHSLTHLHLQWNFIQAGAARALGQALQLNRTLTTLDLQENAIGDEGASSVAGALKVNTTL
IALYLQVASIGSQGAQALGEALTVNRTLEILDLRGNDVGAAGAKALANALKLNSSLRRLNLQENSLGMDG
AIFVASALSENHGLHHINLQGNPIGESAARMISEAIKTNAPTCTVEI

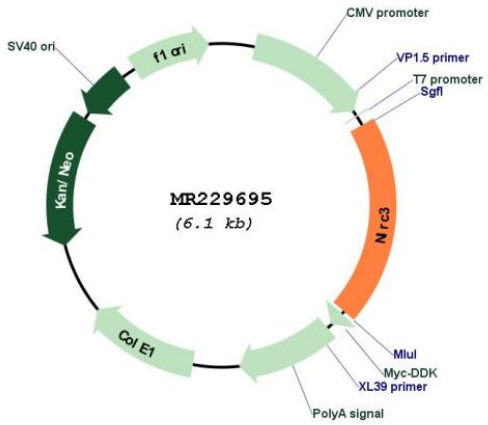
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_175547

ORF Size:	1191 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_175547.4
RefSeq Size:	2003 bp
RefSeq ORF:	1194 bp
Locus ID:	268857
UniProt ID:	Q5DU56
Cytogenetics:	16 A1
MW:	42.1 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 posphatidylinositol 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]