

## Product datasheet for RC207991

### NALP4 (NLRP4) (NM\_134444) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NALP4 (NLRP4) (NM_134444) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NALP4
Synonyms:	CLR19.5; CT58; NALP4; PAN2; PYPAF4; RNH2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207991 representing NM_134444 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGGCAGCCTCTTTCTTCTCTGATTTTGGTCTTATGTGGTATCTGGAGGAGCTCAAAAAGGAGGAGTTCA  
GGAAATTTAAAGAACATCTCAAGCAAATGACTTTGCAGCTTGAAGCAAGCAGATTCCCTGGACTGAGGT  
CAAAAAGCATCCCGGAAGAATTGCAAACCTTTGATCAAGCACTATGAAGAACAACAAGCTTGAAC  
ATAACCTTAAGAATCTTTCAAAGATGGATAGAAAGGATCTCTGCATGAAGGTCATGAGGGAGAGAACA  
GATACACAAAGACCTATCAAGCTCACGCAAAGCAGAAATTCAGCCGCTTATGGTCCAGCAAGTCTGTCC  
TGAGATTCACCTATACTTTGAGGAGGAAGTCAAGCAAGAAGAATGTGACCATTTGGACCCGCTTTTGTCT  
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GAGCCACCTTGATCATCCTCACCAGCTGTGAGATGTGTACAGGAATTGCTAGTTGCCAATTTGAAAAA



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GCAAGGAGAGCACATTGGATTTTTTTGGGGTGTTCCTAACTGGCCTTTTAAATAAAAAGGAACAAGAAA  
 AACTGGATGCGTTTTTTGGCTTCCAAGTGTCCCAAGAGATAAAGCAGCAAATTCACCAGTGCCTGAAGAG  
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**Protein Sequence:**

>RC207991 representing NM\_134444  
 Red=Cloning site Green=Tags(s)

MAASFFSDFGLMWYLEELKKEEFRKFKEHLKQMTLQLELKQIPWTEVKKASREELANLLIKHYEEQQAWN  
 ITLRIFQKMDRKDLCKMVMRERTGYTKYQAHAKQKFSRLWSSKSVTEIHLYFEEVVKQEECDHLDRIFA  
 PKEAGKQPRTVIIQGPQIGKTTLLMKLMAWSDNKIFRDRFLYTFYFCCRELRELPPSLADLISREWP  
 DPAAPITEIVSQPERLLFVIDSFEELQGGLEPDSDLCGDLMEKRPVQVLLSSLLRKKMLPEASLLIAIK  
 PVPCKELRDQVTISEIYQPRGFNESDRLVYFCFFKDPKRAMAFNLVRESEQLFSICQIPLLCWILCTS  
 LKQEMQKGDALALTCQSTTSVYSSFVFNLFPTDGAEGPTQQTQHQLKALCSLAAEGMWTDTFEFCEDDLR  
 RNGVVDADIPALLGTKILLKYGERESSYVFLHVCIQEFCAALFYLLKSHLDHHPAVRVCVQELLVANFEK  
 ARRAHWIFLGCFLTGLLNKKEQEKLDAFFGFQLSQEIKQQIHQCLKSLGERGNPQGVDSLAIIFYCLFEM  
 QDPAFVKQAVNLLQEANFHIIDNVDLVVSAYCLKYCSSLRKLCSVQNVFKKEDEHSSTSDYSLICWHHI  
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 CEAMCSPDVLVYLMLAFCHLSEQCCEYISEMLLRNKSRYLDLSANVLKDEGLKTLCEALKHPDCCLDS  
 LCLVKCFITAAGCEDLASALISNQLKILQIGCNEIGDVGVQLLCRALHTDCRLEILGLEECGLTSTCC  
 KDLASVLTCSKTLQLNLTNLTDHTGVVVLCEALRHPECALQVLGLRKTDFDEETQALLTAEERNPNL  
 TITDDCDITRVEI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg2970\\_b01.zip](https://cdn.origene.com/chromatograms/mg2970_b01.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_134444

**ORF Size:** 2982 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\\_134444.5](#)

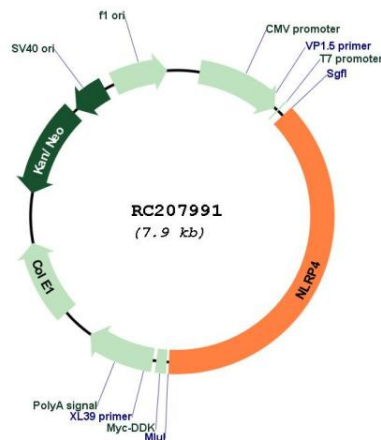
**RefSeq Size:** 3339 bp

**RefSeq ORF:** 2985 bp

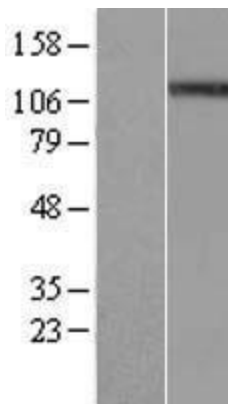
**Locus ID:** 147945  
**UniProt ID:** [Q96MN2](#)  
**Cytogenetics:** 19q13.43  
**MW:** 113.2 kDa

**Gene Summary:** The protein encoded by this gene is a member of the nucleotide-binding and leucine-rich repeat receptor (NLR) family, and is predicted to contain an N-terminal pyrin effector domain (PYD), a centrally-located nucleotide-binding and oligomerization domain (NACHT) and C-terminal leucine-rich repeats (LRR). This gene product has a demonstrated role as a negative regulator of autophagy and type I interferon signaling pathways as a result of protein interactions with its NACHT domain. The PYD domain has also been shown to be important in the inhibition of NF- $\kappa$ B (nuclear factor kappa-light-chain-enhancer of activated B cells). [provided by RefSeq, Dec 2016]

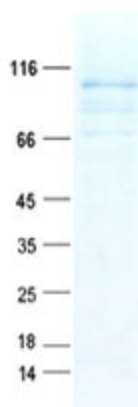
### Product images:



Circular map for RC207991



Western blot validation of overexpression lysate (Cat# [LY408727]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207991 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NLRP4 protein (Cat# [TP307991]). The protein was produced from HEK293T cells transfected with NLRP4 cDNA clone (Cat# RC207991) using MegaTran 2.0 (Cat# [TT210002]).