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Product datasheet for RC201357

NALP2 (NLRP2) (NM_017852) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NALP2 (NLRP2) (NM_017852) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NALP2
Synonyms:	CLR19.9; NALP2; NBS1; PAN1; PYPAF2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC201357 representing NM_017852
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGTCTTCGGCGCAGATGGGCTTCAACCTGCAGGCTCTCCTGGAGCAGCTCAGCCAGGATGAGTTGA
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CAGGACAGAGTCTCCAAAGGCTGCTACTCCTTCATCCACCTCAGCTTCCAGCAGTTTCTCACTGCCCTGT
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Protein Sequence:

>RC201357 representing NM_017852
Red=Cloning site Green=Tags(s)

MVSSAQMGFNLQALLEQLSQDELSKFKYLITTFSLAHELQKIPHKEVDKADGKQLVEILTTHCDSYWVEM
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SDGCCDLTKLLQEKSSLLCLDLGLNHIGVKGMKFLCEALRKPLCNLRCLWLWGCSIPPFSCEDLCSALSC
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WAERPSSHDFMI

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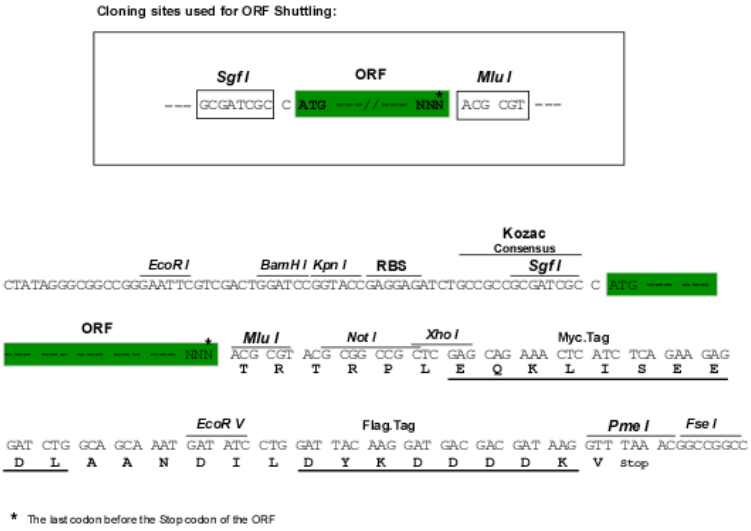
Chromatograms: https://cdn.origene.com/chromatograms/mg2950_d03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017852

ORF Size: 3186 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

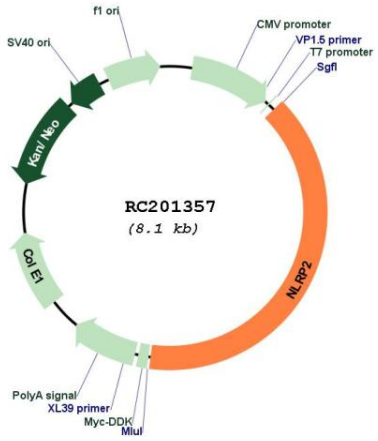
RefSeq: NM_017852.2

RefSeq Size: 3531 bp

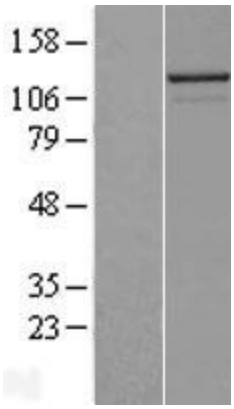
RefSeq ORF: 3189 bp

Locus ID:	55655
UniProt ID:	Q9NX02
Cytogenetics:	19q13.42
Domains:	LRR, LRR_RI
MW:	120.3 kDa
Gene Summary:	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). Members of this gene family are thought to be important regulators of immune responses. This gene product interacts with components of the IkB kinase (IKK) complex, and can regulate both caspase-1 and NF-kB (nuclear factor kappa-light-chain-enhancer of activated B cells) activity. The pyrin domain is necessary and sufficient for suppression of NF-kB activity. An allelic variant (rs147585490) has been found that is incapable of blocking the transcriptional activity of NF-kB. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2016]

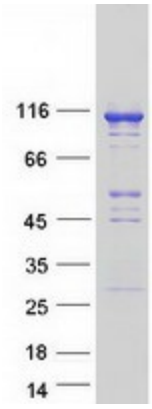
Product images:



Circular map for RC201357



Western blot validation of overexpression lysate (Cat# [LY413416]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201357 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NLRP2 protein (Cat# [TP301357]). The protein was produced from HEK293T cells transfected with NLRP2 cDNA clone (Cat# RC201357) using MegaTran 2.0 (Cat# [TT210002]).