

Product datasheet for RC215750

CARD15 (NOD2) (NM_022162) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CARD15 (NOD2) (NM_022162) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CARD15
Synonyms:	ACUG; BLAU; BLAUS; CARD15; CD; CLR16.3; IBD1; NLR2; NOD2B; PSORAS1; YAOS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215750 representing NM_022162 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGGAAGAGGGTGGTTCAGCCTCTCACGATGAGGAGGAAAGAGCAAGTGTCTCCTCGGACATTCTC
CGGGTTGTGAAATGTGCTCGCAGGAGGCTTTTCAGGCACAGAGGAGCCAGCTGGTCGAGCTGCTGGTCTC
AGGGTCCCTGGAAGGCTTCGAGAGTGTCTGGACTGGCTGCTGCTGGGAGGTCCTCTCCTGGGAGGAC
TACGAGGGCTTCCACCTCTGGCCAGCCTCTCTCCACTTGGCCAGGCGCCTTCTGGACACCGTCTGGA
ATAAGGGTACTTGGCCCTGTCAGAAGCTCATCGCGGCTGCCAAGAAGCCAGGCCGACAGCCAGTCCCC
CAAGCTGCATGGCTGCTGGGACCCCACTCGCTCCACCCAGCCGAGACCTGCAGAGTACCGGCCAGCC
ATTGTCAGGAGGCTCCACAGCCATGTGGAGAACATGCTGGACCTGGCATGGGAGCGGGTTCGTCAGCC
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TGCCACGGTGAAGCGAATGGATTGGCTGCCTTCTTCTACAACATGTTGAGGAATTACCACTCCATTG
GCCCTGCCTTGGGAGCTGCCACATGCAAGAAGTATATGGCCAAGCTGAGGACCAGGTGTCTGCTCAGT
CTCGCTTCTCAGTACCTATGATGGAGCAGAGACGCTCTGCTGGAGGACATATACACAGAGAATGCTCT
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GCAAGAGCACGCTCCTGCAGCGGCTGCACTTGTGTGGGCTGCAGGGCAAGACTTCCAGGAATTTCTCTT
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GAGCACTGCTGTTGGCCTGATGTTGGTCAAGAAGACATCTTCCAGTTACTCCTTGACCACCTGACCGTG
TCCTGTTAACCTTTGATGGCTTTGACGAGTTCAAGTTCAGGTTACGGATCGTGAACGCCACTGCTCCCC
GACCGACCCACCTCTGTCCAGACCCTGCTCTTCAACCTTCTGCAGGGCAACCTGCTGAAGAATGCCCGC
AAGGTGGTGACCAGCCGTCGGCCGCTGTGTCGGGTTTCTCAGGAAGTACATCCGACCCAGGTTCAACC
TCAAGGGCTTCTCTGAACAGGGCATCGAGCTGTACCTGAGGAAGCGCCATCATGAGCCCGGGGTGGCGGA
CCGCTCATCCGCTGCTCCAAGAGACCTCAGCCCTGCACGGTTGTGCCACCTGCTGTCTTCTCATGG



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ATGGTGTCCAAATGCCACCAGGAAGTGTGCTGCAGGAGGGGGTCCCCAAAGACCACTACAGATATGT
 ACCTGCTGATTCTGCAGCATTTTCTGCTGCATGCCACCCCCAGACTCAGCTTCCCAAGGTCTGGGACC
 CAGTCTTCTTCGGGGCCGCTCCCCACCCTCTGCACCTGGGCAGACTGGCTCTGTGGGGCTGGGCATG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215750 representing NM_022162
 Red=Cloning site Green=Tags(s)

MGEEGGSASHDEEERASVLLGHSPGCEMCSQEAFAQRSQVVELLVSGSLEGFESVLDWLLSWEVLSWED
 YEGFHLLGQPLSHLARRLLDTVWNKGTWACQKLIAAAQEAQADSQSPKLGHCWDPHSLHPARDLQSHRPA
 IVRRLHSHVENMLDLAWERGFVSQYECDEIRLPIFTSPQRARRLLDLATVKANGLAAFLLQHVQELPVPL
 ALPLEAATCKKYMALRRTTVSAQSRFLSTYDGAETLCLEDIYTENVLEVWADVGMAGPPQKSPATLGLLE
 LFSTPGHLNDDADTVLVGEAGSGKSTLLQRLHLLWAAGQDFQEFLFVFPFSCRQLQCMAPL SVRLLF
 EHCCWPDVQEDIFQLLLDHPDRVLLTFDGFDEFKFRFTDRERHCSPTDPTSVQTLLENLLQGNLLKNAR
 KVVTSRPAAVSAFLRKYIRTEFNLKGFSEQGIELYLKRHHHEPGVADRLIRLLQETSALHGLCHLPVFSW
 MYSKCHQELLLQEGGSPKTTTDMYLLILQHFLHATPPDSASQGLGPSLLRGRLPTLLHLGRLALWGLGM
 CCYVYFSAQQLQAAQVSPDDISLGFVRAKGVVPGSTAPLEFLHITFQCFFAAFYLALSADVPPALLRHLF
 NCGRPGNSPMARLLPTMCIQASEGKDSSVAALLQKAEPHNLQITAAFLAGLLSREHWGLLAECQTSEKAL
 LRRQACARWCLARSLRKHFHSIPPAAPGEAKSVHAMPGF IWLIRSLYEMQEERLARKAARGLNVGHKL T
 FCSVGPTECAALAFVLQHLRRPVALQLDYNSVGDIGVEQLL PCLGVCKALYLRDNNISDRGICKLIECAL
 HCEQLQKLALFNNKLDGCAHSMAKLLACRQNFALRLGNYYITAAGAQLAEGLRGNTSLQFLGFWGNR
 VGDEGAQALAEALGDHQLRRLSLVGNNGISVGAQALALMLAKNVMLEELCLEENHLQDEGVCSLAEGLK
 KNSSLKILKLSNNCITYLGAEALLQALERNDTILEVWLRGNTFSLEEVDKLGCRDTRLLL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_022162

ORF Size: 3120 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_022162.3](#)

RefSeq Size: 4485 bp

RefSeq ORF: 3123 bp

Locus ID: 64127

UniProt ID: [Q9HC29](#)

Cytogenetics: 16q12.1

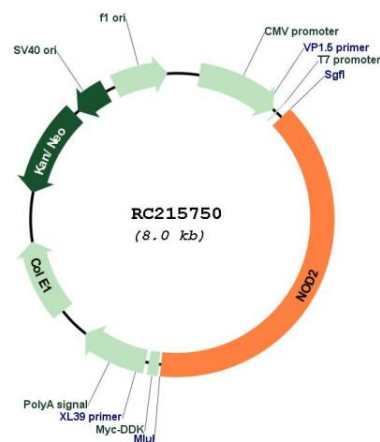
Protein Families: Druggable Genome

Protein Pathways: NOD-like receptor signaling pathway

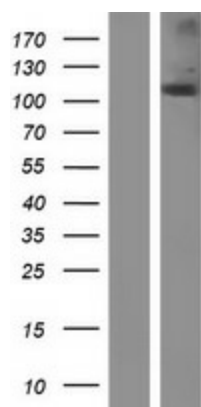
MW: 115.1 kDa

Gene Summary: This gene is a member of the Nod1/Apaf-1 family and encodes a protein with two caspase recruitment (CARD) domains and six leucine-rich repeats (LRRs). The protein is primarily expressed in the peripheral blood leukocytes. It plays a role in the immune response to intracellular bacterial lipopolysaccharides (LPS) by recognizing the muramyl dipeptide (MDP) derived from them and activating the NFKB protein. Mutations in this gene have been associated with Crohn disease and Blau syndrome. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jun 2014]

Product images:



Circular map for RC215750



Western blot validation of overexpression lysate (Cat# [LY411732]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215750 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).