

## Product datasheet for **RG239883**

### **CARD15 (NOD2) (NM\_001293557) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CARD15 (NOD2) (NM_001293557) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NOD2
Synonyms:	ACUG; BLAU; BLAUS; CARD15; CD; CLR16.3; IBD1; NLRC2; NOD2B; PSORAS1; YAOS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG239883 representing NM\_001293557.  
 Blue=ORF Red=Cloning site Green=Tag(s)

```

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGTGCTCGCAGGAGGCTTTTCAGGCACAGAGGAGCCAGCTGGTTCGAGCTGCTGGTCTCAGGGTCCCTG
GAAGGCTTCGAGAGTGTCTGGACTGGCTGTCTCTGGGAGGTCTCTCTGGGAGGACTACGAGGGC
TTCCACCTCCTGGGCCAGCCTCTCCCACTTGGCCAGGCGCCTTCTGGACACCGTCTGGAATAAGGGT
ACTTGGGCTGTGAGAAGCTCATCGCGGCTGCCAAGAAGCCAGGCCGACAGCCAGTCCCCAAGCTG
CATGGCTGCTGGGACCCCACTCGCTCCACCCAGCCGAGACCTGCAGAGTACCAGGCCAGCCATTGTC
AGGAGGCTCCACAGCCATGTGGAGAACATGCTGGACCTGGCATGGGAGCGGGGTTTCGTAGCCAGTAT
GAATGTGATGAAATCAGGTTGCCGATCTTACACCGTCCAGAGGGCAAGAAGGCTGTTGATCTTGCC
ACGGTCAAAGCGAATGGATTGGCTGCCTTCTTACAACATGTTAGGAATTACCAGTCCCATTGGCC
CTGCCCTTGAAGCTGCCACATGCAAGAAGTATATGGCCAAGCTGAGGACCACGGTGTCTGCTCAGTCT
CGCTTCTCAGTACCTATGATGGAGCAGAGACGCTCTGCCTGGAGGACATATACACAGAGAATGCCTG
GAGGTCTGGGCAGATGTGGGCATGGCTGGACCCCGCAGAAAGAGCCAGCCACCTGGGCCCTGGAGGAG
CTTTCAGCACCCCTGGCCACCTCAATGACGATGCGGACACTGTGCTGGTGGTGGTGGGCGGGCAGT
GGCAAGAGCAGCTCCTGCAGCGGCTGCACTTGTGTGGGCTGCAGGGCAAGACTTCAGGAATTTCTC
TTTGTCTTCCATTACAGTGCAGGACGCTGAGTGCATGGCCAAACCACTCTCTGTGCGGACTCTACTC
TTTGAGCACTGCTGTTGGCCTGATGTTGGTCAAGAAGACATCTTCCAGTTACTCCTTGACCACCCCTGAC
CGTGTCTGTAACTTTGATGGCTTTGACGAGTTCAAGTTCAGGTTACGGATCGTGAACGCCACTGC
TCCCGGACCGACCCACCTCTGTCCAGACCTGCTTCAACCTTCTGCAGGGCAACCTGCTGAAGAT
GCCCGCAAGGTGGTGACCAAGGCTCCGCGGCTGTGTCGGCTTCTCAGGAAGTACATCCGACCGAG
TTCAACCTCAAGGCTTCTGTAACAGGCAATCGAGCTGTACCTGAGGAAGCGCCATCATGAGCCGGG
GTGGCGGACCGCTCATCCGCTGCTCCAAGAGACCTCAGCCCTGCACGTTTGTGCCACCTGCCTGTC
TTCTCATGGATGGTGTCCAAATGCCACCAGGAAGTGTGCTGCAGGAGGGGGGTTCCCAAGACCACT
ACAGATATGTACCTGCTGATTCTGCAGCATTTTCTGCTGCATGCCACCCCCAGACTCAGCTTCCCAA
GGTCTGGGACCCAGTCTTCTCGGGGCCGCTCCCAACCTCCTGCACCTGGGCAGACTGGCTCTGTGG
GGCCTGGGCATGTGCTGCTACGTGTTCTCAGCCAGCAGCTCCAGGCAGCACAGGTGAGCCCTGATGAC
ATTTCTCTTGGCTTCTGGTGCCTGCCAAAGGTGCTGTCAGGGAGTACGGCGCCCTGGAATTCCTT
CACATCACTTTCCAGTGTCTTCTGCGCGTCTACCTGGCACTCAGTGTGATGTGCCACCAGCTTTG
CTCAGACACCTTCAATTGTGGCAGGCCAGGCAACTACCAATGGCCAGGCTCCTGCCACGATGTGC
ATCCAGGCCTCGGAGGAAAGGACAGCAGCGTGGCAGCTTTGCTGCAGAAGGCCGAGCCGACAACCTT
CAGATCACAGCAGCCTTCTGGCAGGGCTGTTGTCCCGGAGCACTGGGGCTGCTGGCTGAGTGCCAG
ACATCTGAGAAGGCCCTGCTCCGGCGCCAGGCTGTGCCCGTGGTGTCTGGCCCGCAGCCTCCGCAAG
CACTTCCACTCCATCCCGCCAGCTGCACCGGTGAGGCCAAGAGCGTGCATGCCATGCCCGGTTTATC
TGGCTCATCCGGAGCCTGTACGAGATGCAGGAGGAGCGGCTGGCTCGGAAGGCTGCACGTGGCCTGAT
GTTGGGCACCTCAAGTTGACATTTTGCAGTGTGGGCCCACTGAGTGTGCTGCCCTGGCCTTTGTGCTG
CAGCACCTCCGGCGCCGCTGGCCCTGCAGCTGGACTACAACCTGTGGGTGACATTGGCGTGGAGCAG
CTGCTGCCTTGCCTTGGTGTCTGCAAGGCTCTGTATTTGCGGATAACAATATCTCAGACCGAGGCATC
TGCAAGCTCATTGAATGTGCTTCTCACTGCGAGCAATTGCAGAAGTTAGCTCTATTCAACAACAATTG
ACTGACGGCTGTGCACTCCATGGCTAAGCTCCTTGCATGCAGGCAGAATTCTTGGCATTGAGGCTG
GGGAATAACTACATCACTGCCGCGGAGCCCAAGTGTGGCCGAGGGGCTCCGAGGCAACACCTCCTTG
CAGTTCCTGGATTCTGGGGCAACAGAGTGGGTGACGAGGGGGCCAGGCCCTGGCTGAGCCTTGGGT
GATCACCAGAGCTTGGGTGGCTCAGCCTGGTGGGGAACAACATTGGCAGTGTGGGTGCCAAGCCTTG
GCACTGATGCTGGCAAAGACGTATGCTAGAAGAACTCTGCCTGGAGGAGAACCATCTCCAGGATGAA
GGTGTATGTTCTCTCGCAGAAGGACTGAAGAAAATTCAAGTTTGAATCCTGAAGTTGTCCAATAAC
TGATCACCTACCTAGGGCAGAAAGCCCTCTGCAGGCCCTTGAAGGAATGACACCATCTGGAAGTC
TGGCTCCGAGGGAACACTTTCTCTAGAGGAGGTTGACAAGCTCGGCTGCAGGGACACCAGACTCTTG
CTT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
  
```

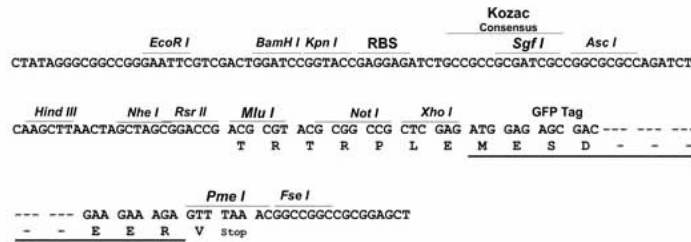
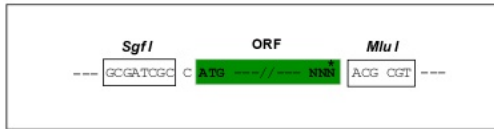
**Protein Sequence:** >Peptide sequence encoded by RG239883  
 Blue=ORF Red=Cloning site Green=Tag(s)

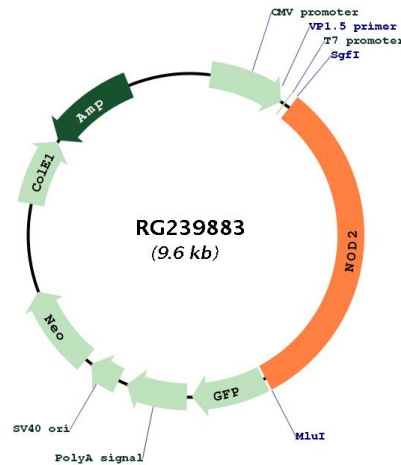
MCSQEFQAQRSQVLVLLVSGSLEGFESVLDWLLSWEVLSWEDYEGFHLLGQPLSHLARRLLDVTWNKG  
 TWACQKLIAAAQEAQADSQSPKLHGCWDPHSLHPARDLQSHRPAIVRRLHSHVENMLDLAWERGFVSQY  
 ECDEIRLPIFTSPQRARRLLDLATVKANGLAAFLLQHVQELPVPLALPLEAATCKKYMALRRTTVAQS  
 RFLSTYDGAETLCELDIYTENVLEWADVGMAGPPQKSPATLGLEELFSTPGHLNDDADTVLVGGEAGS  
 GKSTLLQRLHLLWAAGQDFQEFVFPFSCRQLQCMAPLSVRITLLFEHCCWPDVQEDIFQLLLDHPD  
 RVLLTFDGFDEFKFRFTDRERHCSPTDPTSVQTLLENLLQGNLLKNARKVVTSRPAAVSAFLRKYIRTE  
 FNLKGFSEQGIELYLKRKHHEPGVADRLIRLLQETSALHGLCHLPVFSWMVSKCHQELLLQEGGSPKTT  
 TDMYLLILQHFLHATPPDSASQGLGPSLLRGRPLTLLHLGRLALWGLMCCYVFAQQQLQAAQVSPDD  
 ISLGLVRAKGVVPGSTAPLEFLHITFQCFFAAFYLALSADVPPALLRHLFNCGRPGNSPMARLLPTMC  
 IQASEGKDSSVAALLQKAEPHNLQITAAFLAGLLSREHWGLLAECQTSKALLRRQACARWCLARSLRK  
 HFHSIPPAAPGEAKSVHAMPGF IWLIRSLYEMQEERLARKAARGLVNGLKLTFCVSGPTECAALAFVL  
 QHLRRPVALQLDYNVSGDIGVEQLLPCLGVCKALYLRDNNISDRGICKLIECALHCEQLQKALFNNKL  
 TDGCAHMAKLLACRQNFALRLGNNTAAGAQLVAEGLRGNTSLQFLFGWGNRVGDEGAQALAEALG  
 DHQSLRWLSLVGNNIGSVAQALALMLAKNVMLEELCLEENHLQDEGVCSLAEGLKKNSSLKILKLSNN  
 CITYLGAELQLALERNDTILEVWLRGNTFSLEEVDKLGCRDTRLLL  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSDSHMHFKSAIHP SILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** NM\_001293557

**ORF Size:** 3039 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).

**RefSeq:** [NM\\_001293557.2](#)

**RefSeq Size:** 4459 bp

**RefSeq ORF:** 3042 bp

**Locus ID:** 64127

**UniProt ID:** [Q9HC29](#)

**Cytogenetics:** 16q12.1

**Protein Families:** Druggable Genome

**Protein Pathways:** NOD-like receptor signaling pathway

**MW:** 113 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 NFκB 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]