

Product datasheet for SC323936

CARD4 (NOD1) (NM_006092) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CARD4 (NOD1) (NM_006092) Human Untagged Clone
Tag:	Tag Free
Symbol:	CARD4
Synonyms:	CARD4; CLR7.1; NLRC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_006092.1
 CCCGGCCCCGGCGTCCCCGGACCATGGCGCTCTCCGGGCTCTTCTAGCTCTCAGCGGC
 TCGGAAGTCTGTAACCTGGTGGCCAAGTGATTGTAAGTCAGGAGACTTTCCTTCGGTTT
 CTGCCTTTGATGGCAAGAGGTGGAGATTGTGGCGCGATTACAGAAAACGTCTGGGAAGA
 CAAGTTGCTGTTTTATGGGAATCGCAGGCTTGGAAAGACAGAAAGCAATTCCAGAAATA
 AATTGGAAATTGAAGATTTAAACAATGTTGTTTTAAAACATTCTAACTTCAAAGAATGAT
 GCCAGAAACTTAAAAAGGGGCTGCGCAGAGTAGCAGGGGCCCTGGAGGGCGCGCCTGAA
 TCCTGATTGCCCTTCTGCTGAGAGGACACACGCAGCTGAAGATGAATTTGGGAAAAGTAG
 CCGCTTGCTACTTTAACTATGGAAGAGCAGGGCCACAGTGAGATGGAAAATATCCCATCA
 GAGTCTCACCCCCACATTCAATTACTGAAAAGCAATCGGGAACCTCTGGTCACTCACATC
 CGCAATACTCAGTGTCTGGTGGACAACCTGCTGAAGAATGACTACTTCTCGGCCGAAGAT
 GCGGAGATTGTGTGTGCCTGCCACCCAGCCTGACAAGTCCGCAAAATCTGGACCTG
 GTACAGAGCAAGGGCGAGGAGGTGCCAGTTCTTCTCTACTTGTCCAGCAACTCGCA
 GATGCCTACGTGGACCTCAGGCCTTGGCTGCTGGAGATCGGCTTCTCCCTTCCCTGCTC
 ACTCAGAGCAAAGTCGTGGTCAACACTGACCCAGTGAGCAGGTATACCCAGCAGCTGCGA
 CACCATCTGGGCCGTGACTCCAAGTTCGTGCTGTGCTATGCCAGAAGGAGGAGCTGCTG
 CTGGAGGAGATCTACATGGACACCATCATGGAGCTGGTTGGCTTCCAGCAATGAGAGCCTG
 GGCAGCCTGAACAGCCTGGCCTGCCTCCTGGACCACACCACCGGCATCCTCAATGAGCAG
 GGTGAGACCATCTCATCCTGGGTGATGCTGGGGTGGCAAGTCCATGCTGCTACAGCGG
 CTGCAGAGCCTCTGGCCACGGGCCGGCTAGACGCAGGGGTCAAATTCTTCTTCCACTTT
 CGCTGCCGCATGTTGAGCTGCTTCAAGGAAAGTACAGGCTGTGTCTGCAGGACCTGCTC
 TTCAAGCACTACTGCTACCCAGAGCGGGACCCGAGGAGGTGTTTGCCTTCTGTGCGC
 TTCCCCACGTGGCCCTTTCACCTTCGATGGCCTGGACGAGCTGCACTCGGACTTGGAC
 CTGAGCCGTGTGCTGACAGCTCCTGCCCTGGGAGCCTGCCACCCCTGGTCTTGCTG
 GCCAACCTGCTCAGTGGGAAGCTGCTCAAGGGGGCTAGCAAGCTGCTCACAGCCCCGACA
 GGCATCGAGTCCCGCGCAGTTCTGCGGAAGAAGTGTCTTCCGGGGCTTCTCCCC
 AGCCACCTGCGCGCTATGCCAGGAGGATGTTCCCGAGCGGGCCCTGCAGGACCGCCTG



[View online »](#)

CTGAGCCAGCTGGAGGCCAACCCCAACCTCTGCAGCCTGTGCTCTGTGCCCTCTTCTGC
 TGGATCATCTTCCGGTGTCTCCAGCACTTCCGTGCTGCCTTTGAAGGCTCACCACAGCTG
 CCCGACTGCACGATGACCCTGACAGATGTCTTCTCCTGGTCACTGAGGTCCATCTGAAC
 AGGATGCAGCCCAGCAGCCTGGTGCAGCGGAACACACAGCCCAGTGGAGACCCCTCCAC
 GCCGGCCGGGACACTCTGTGCTCGCTGGGGCAGGTGGCCACCGGGGCATGGAGAAGAGC
 CTCTTTGTCTTACCCAGGAGGAGTGCAGGCCCTCCGGGCTGCAGGAGAGAGACATGCAG
 CTGGGCTTCTGCGGGCTTTGCCGGAGCTGGGCCCGGGGTGACCAGCAGTCTATGAG
 TTTTTCCACCTCACCTCCAGGCCCTTTACAGCCTTCTTCTCCTGTGCTGGACGACAGG
 GTGGGCACTCAGGAGCTGCTCAGGTTCTTCCAGGAGTGGATGCCCTGCGGGGGCAGCG
 ACCACGTCTGTATCTCCCTTCTCCGTTCCAGTGCCTGCAGGGCAGTGGTCCGGCG
 CGGAAGACCTCTTCAAGAACAAGGATCACTTCCAGTTCACCAACCTTCTCTGTGCGGG
 CTGTTGTCAAAGCCAAACAGAACTCTGCGGCATCTGGTGCCCGGGCAGCCCTGAGG
 AGAAAGCGCAAGGCCCTGTGGGCACACCTGTTTTCCAGCCTGCGGGGCTACCTGAAGAGC
 CTGCCCCGCTTCAAGTCAAGGCTTCAACCAGTGCAGGCCATGCCACGTTTCTGAGG
 ATGCTGCGCTGCATCTACGAGACACAGAGCCAGAAGTGGGGCAGCTGGCGGCCAGGGGC
 ATCTGCGCAACTACCTCAAGCTGACCTACTGCAACGCCTGCTCGGCCGACTGCAGCGCC
 CTCTCCTTCTGCTGCATCACTTCCCAAGCGGCTGGCCCTAGACCTAGACAACAACAAT
 CTCAACGACTACGGCGTGCAGGAGTGCAGCCCTGCTTCCAGCCGCTCACTGTTCTCAGA
 CTCAGCGTAAACCAGATCACTGACGGTGGGGTAAAGGTGCTAAGCGAAGAGCTGACCAA
 TACAAAATTGTGACCTATTTGGGTTTATAACAACAACCAGATCACCAGTGTGCGAGCCAGG
 TACGTACCAAAATCCTGGATGAATGCAAAGGCCTCACGCATCTTAACTGGGAAAAAAC
 AAAATAACAAGTGAAGGAGGGAAGTATCTCGCCCTGGCTGTGAAGAACAGCAAATCAATC
 TCTGAGGTTGGGATGTGGGGCAATCAAGTTGGGGATGAAGGAGCAAAGCCTTCCGAGAG
 GCTCTGCGGAACCCACAGCTTGACCACCTGAGTCTTGGGTCCAACGGCATCTCCACA
 GAAGGAGGAAAGAGCCTTGCAGGGCCCTGCAGCAGAACACGCTCTTAGAAATACTGTGG
 CTGACCCAAAAAGAACTCAACGATGAAGTGGCAGAGAGTTTGGCAGAAATGTTGAAAGTC
 AACAGACGTTAAAGCATTTATGGCTTATCCAGAATCAGATCACAGCTAAGGGGACTGCC
 CAGCTGGCAGATGCGTTACAGAGCAACTGGCATAACAGAGATTTGCCTAAATGGAAC
 CTGATAAAACCAGAGGAGGCCAAAGTCTATGAAGATGAGAAGCGGATTATCTGTTTCTGA
 GAGGATGCTTTCTGTTTATGGGTTTTTGCCTGGAGCCTCAGCAGCAAATGCCACTCT
 GGGCAGTCTTTTGTGTCAGTGTCTTAAAGGGCCTGCGCAGGCGGACTATCAGGAGTCC
 ACTGCCTCCATGATGCAAGCCAGCTTCTGTGCAAGGCTGGTTCGGCAAACCTCCCTAA
 GTACCCGCTACAATTCTGCAGAAAAAGAATGTGTCTTGGCAGCTGTTGTAGTTACAGTAA
 ATACACTGTGAAGAGACTTTATTGCCTATTATAATTATTTTTATCTGAAGCTAGAGGAAT
 AAAGCTGTGAGCAAACAGAGGAGGCCAGCCTCACCTCATTCCAACACCTGCCATAGGGAC
 CAACGGGAGCGAGTTGGTACCAGCTCTTTTCAATGAAGAGTTGAGGATGTGGCACAAGT
 TGGTGCCAAGCTCTTGAATAAAACGTGTTTGTAGGATTAGTATTATACCTGAAATATTT
 TCTTCTTCTCAGCACTTTCCATGTATTGATACTGGTCCACTTACAGCTGGAGACAC
 CGGAGTATGTGCAGTGTGGGATTTGACTCCTCAAGGTTTTGTGGAAAGTTAATGTCAAG
 GAAAGGATGCACCACGGGCTTTTAAATTTAATCCTGGAGTCTCACTGTCTGCTGGCAAAG
 ATAGAGAATGCCCTCAGCTCTTAGCTGGTCTAAGAATGACGATGCCTTCAAATGCTGCT
 TCCACTCAGGGCTTCTCCTCTGCTAGGCTACCCTCCTCTAGAAGGCTGAGTACCATGGGC
 TACAGTGTCTGGCCTTGGGAAGAAGTATTCTGTCCCTCAAAGAAATAGGGCATGGCTT
 GCCCTGTGGCCCTGGCATCCAATGGCTGCTTTTGTCTCCCTTACCTCGTGAAGAGGGG
 AAGTCTTCTCCTCCCAAGCAGCTGAAGGGTACTAAACGGGCGCAAGACTCAGGG
 GATCGGCTGGAACTGGGCCAGCAGAGCATGTTGGACACCCCCACCATGGTGGGCTTGT
 GGTGGCTGCTCCATGAGGGTGGGGTGATACTACTAGATCACTTGTCTCTTGCCAGCTC
 ATTTGTTAATAAAATACTGAAAACACTAAAAAAAAAAAAAAAAA

Restriction Sites:

ECoRI-NOT

ACCN:

NM_006092

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none">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_006092.1 , NP_006083.1
RefSeq Size:	4390 bp
RefSeq ORF:	2862 bp
Locus ID:	10392
UniProt ID:	Q9Y239
Cytogenetics:	7p14.3
Domains:	CARD, LRR, LRR_RI
Protein Families:	Druggable Genome
Protein Pathways:	Epithelial cell signaling in Helicobacter pylori infection, NOD-like receptor signaling pathway
Gene Summary:	This gene encodes a member of the nucleotide-binding oligomerization domain (NOD)-like receptor (NLR) family of proteins. The encoded protein plays a role in innate immunity by acting as a pattern-recognition receptor (PRR) that binds bacterial peptidoglycans and initiates inflammation. This protein has also been implicated in the immune response to viral and parasitic infection. Major structural features of this protein include an N-terminal caspase recruitment domain (CARD), a centrally located nucleotide-binding domain (NBD), and 10 tandem leucine-rich repeats (LRRs) in its C terminus. The CARD is involved in apoptotic signaling, LRRs participate in protein-protein interactions, and mutations in the NBD may affect the process of oligomerization and subsequent function of the LRR domain. Mutations in this gene are associated with asthma, inflammatory bowel disease, Behcet disease and sarcoidosis in human patients. [provided by RefSeq, Aug 2017]