

Product datasheet for **MG225900**

Nod1 (NM_172729) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nod1 (NM_172729) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nod1
Synonyms:	C230079P11; Card4; F830007N14Rik; Nlrc1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG225900 representing NM_172729
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGGAACACGGCCATCATGAGATGGAAGGCACCCCATGGGTTGTCCTCCACATTAACCTGCTGA
 AGATCAACAGGGAACATCTGGTCAACAACATTCGGAACACTCAGTGTCTGGTGGACAACCTGCTGGAGAA
 TGCTACTTCTCAGCCGAAGATGCAGAGATTGTGTGTGCCTGTCCACCAAGCCTGACAAGTCCGAAAG
 ATCCTTGACCTGGTGCAGAGCAAAGGCGAGGAGGTGTCTGAGTTCTTCTCTACGTGCTGCAGCAGCTGG
 AGGATGCTTACGTGGACCTCAGGCTGTGGCTCTCAGAAATTGGCTTCTCCCTTCCAGCTCATTCCGGAC
 CAAAATATCGTCAATACTGACCCAGTAAGCAGGTATACCAACAGCTGCGACACCAACTGGGCCGCGAC
 TCCAAGTTCATGTGTGTACGCCAGAAGGAGGACCTGTGTGGAGGAGACCTATATGGACACTCA
 TGGAGCTGGTAGGCTTCAACAATGAAAACCTGGGCAGCCTAGGAGGCCTGGATTGCCTGTGGACCACAG
 TACGGGCGTCTCAACGAGCATGGCGAGACTGTCTTCGTGTTCCGGGACGCGGGAGTGGCAAGTCCATG
 CTGCTGCAGAGGTTGCAGAGCCTCTGGGCGTCAGGCAGGTTGACCTCCACAGCCAAATCTTCTTCCACT
 TCCGCTGCCGCATGTTACGCTGCTTCAAGGAGAGCGACATGCTGAGTCTGCAGGACCTGCTCTTCAAGCA
 TTTCTGTACCCGGAGCAGGACCCCGAGGAGGTGTTCTCCTTCTTGTGCTGCGCTTTCCCCACACAGCGCTC
 TTCACTTTTACGGCCTGGATGAGCTGCACTCAGACTTCGACCTGAGCCGCTGCCGGATAGCTGTGCC
 CCTGGGAGCCGGCTCACCTCTGGTCTGCTGGCTAACCTCCTAAGTGGGAGGCTGCTCAAGGTGCCGG
 CAAATTGCTCACTGCTCGCACAGGCGTGGAGGTCCCCGCCAGCTCCTGCGCAAAAAGGTGCTGTCCGG
 GGCTTCTCCCAAGTCACTGCGCGCCTATGCCCGCCGGATGTTCCCGAGCGCACAGCCAGGAGCATC
 GTGCGACGAGCTGGATGCCAACCCCACTCTGCAGCCTGTGCGGGGTGCCGCTTCTGTTGGATCAT
 CTTCGGTGTTCAGCACTTCCAGACGCTTTCGAGGGCTCCTTTCACAGTTGCCGGACTGTGCTGTG
 ACCCTGACCGATGCTTTCTGCTGGTCACTGAGGTGCATCTGAACAGGCCGACGCCAGCAGCCTGGTGC
 AGCGCAACACGCGCAGCCCGCGGAAACCTACGTGCAGGCTGGCGCACGCTGCATGCGCTGGGAGAGGT
 GGCTCACCGAGGCACCGACAAGAGCCTCTTGTGTTTGGCCAGGAGGAGGTGCAGGCGTGAAGCTGCAG
 GAAGGAGATCTGCAGCTGGGCTTCTGCGGGCTTTGCCGATGTGGGCCCTGAGCAGGGCCAGTCTTACG
 AATTTTTCCACCTTACGCTCCAGGCTTCTTACCAGCTTCTTCTGTTAGCAGATGACAAAGTGAACAC
 CCGGGAGTTGCTGAGGTTCTTTGAGAATGGACGTCCTGGAGAGGCAACAAGCTGCTCCTGCCATTCT
 TCCTTCTTCTCCTCCAGTGCCTGGGCGCAGAAGCCGTTGGGCCCTGATCCTTTCAGGAACAAGATC
 ACTTCCAGTTCACCAACCTCTTCTGTGCGGGCTACTGGCCAAAGCCGACAGAACTCCTTCGGCAGCT
 GGTGCCCAAGGCTATCCTGAGGAGGAAGCGCAAGGCCCTGTGGGCTCACCTGTTTGTAGCCTGCGCTCC
 TACTTGAAGAGCCTACCTCGGGTCCAGTCTGGAGGCTTTAACCAGGTGCATGCCATGCCACATTCTGT
 GGATGCTGCGCTGCATCTATGAGACGCAGAGCCAGAAGGTGGGGCGCCTCGCCGCCAGGGGCATCAGTGC
 GGACTACCTCAAGCTGGCCTTTTGAACGCTTGTCTGCGGACTGCAGCGCCTGTCTTCTGCTCTGCAT
 CACTTCCACAGGCAGCTGGCCCTAGACCTGGACAACAACAACCTCAATGACTATGGCGTGCAGGAGCTGC
 AGCCTTGCTTTAGCCGTCTCACGGTTATCAGACTCAGCGTCAACCAGATCACCGACAGGGGGTGAAGGT
 GCTATGTGAGGAACTGACCAAGTAAAGATCGTGACGTTCTGGGTTTATAACAACAACAGATAACTGAT
 ATCGGAGCCAGGTATGTGGCCAAATCCTGGATGAATGCAGAGGCTCAAGCACCTTAAACTAGGGAAAA
 ACAGAATAACAAGTGAAGGCGGGAAGTGTGTGGCTTTGGCTGTGAAGAACAGCACCTCCATCGTTGATGT
 TGGGATGTGGGTAATCAGATTGGAGACGAAGGGGCAAAGGCCTTCGAGAGGCATTGAAGGACCACCC
 AGCCTGACCACTCTCAGTCTTGCAATTCAATGGCATCTCTCCGAGGGAGGGAAGGCCTTGGCAGGCCC
 TGAAGCAGAACACCACACTGACAGTAATCTGGCTGACCAAAAATGAACTTAAATGATGAGTCTGCAGAGT
 CTTGCTGAGATGCTGAGAGTGAACCAGACGCTACGGCATTATGGCTGATCCAGAATCGCATCACAGCC
 AAGGGGACAGCGAGCTGGCAGGGCACTGCAGAAGAACAGCCATAACAGAGATTTGTCTCAATGGAA
 ACTTGATTAAGCCCGAGGAGGCCAAAGTCTTCGAGAATGAGAAGAGAATCATCTGCTTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG225900 representing NM_172729
 Red=Cloning site Green=Tags(s)

MEEHGHHEMGTPLGCHSHIKLLKINREHLVTNIRNTQCLVDNLLLENGYFSAEDAEIVCACPTKPKDKVRK
 ILDLVQSKGEEVSEFFLYVLQQLDAYVDLRLWLSEIGFSPSQLIRTKTIVNTDPVSRYTQQLRHQLGRD
 SKFMLCYAQKEDLLLEETYMDTLMELVGFNNENLGLGGLDCLLDHSTGVLNEHGETVVFVGDAGVKGSM
 LLQRLQSLWASGRLTSTAKFFFHFRCRMFSCKFESDMLSLQDLLFKHFCYPEQDPPEEVFSFLLRFPHTAL
 FTFDGLDELHSDFDL.SRVPDSCCPWEP.AHPL.VLLANLLSGRLLKGAGKLLTARTGVEVPRQLLRKKVLLR
 GFSPSHLRAYARRMFPERTAQEHLQQLDANPNLCSLGGVPLFCWIIIFRCFQHFQTVFEGSSSQLPDCAV
 TLTDVFLLVTEVHLNRPQPSLVQRNTRSPAETLRAGWRTLHALGEVAHRGTDKSLFVFGQEEVQASKLQ
 EGDQLGFLRALPDVGPQGGQSYEFFHLLTLQAFFTAFFLVADDKVSTRELLRFFREWTSPEATSSSCHS
 SFFSFQCLGGRSRLGPDPRNKDHFQFTNLFLCGLLAKARQKLLRQLVPKAILRRKRKALWAHLFASLRS
 YLKSLPRVQSGGFNQVHAMPFTLWMLRCIYETQSQKVGRLAARGISADYLKLAFCNACSADCSALSFVLH
 HFHRQLALDLNNDLNDYGVQELQPCFSRLTVIRLSVNQITDTGVKVLCEELTKYKIVTFLGLYNNQITD
 IGARYVAQILDECRGLKHLKLGKNRITSEGGKCVLAVKNSTSIVDVGMWGNQIGDEGAKAF AEALKDHP
 SLTTLSLAFNGISPEGGKSLAQALKQNTTLTVIWLTKNELNDESAECFAEMLRVNQTLRHLWLIQNRITA
 KGTAQLARALQKNTAITEICLNGNLIKPEEAKVFENEKRIICF

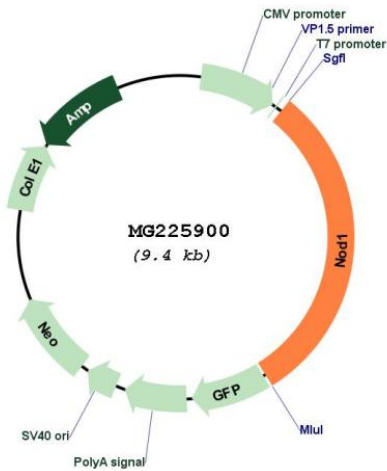
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_172729

ORF Size: 2859 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_172729.3](#), [NP_766317.1](#)

RefSeq Size: 4327 bp

RefSeq ORF: 2862 bp

Locus ID: 107607

UniProt ID: [Q8BHB0](#)

Cytogenetics: 6 B3

Gene Summary:

Enhances caspase-9-mediated apoptosis. Induces NF-kappa-B activity via RIPK2 and IKK-gamma. Confers responsiveness to intracellular bacterial lipopolysaccharides (LPS). Forms an intracellular sensing system along with ARHGEF2 for the detection of microbial effectors during cell invasion by pathogens. Recruits NLRP10 to the cell membrane following bacterial infection (By similarity).[UniProtKB/Swiss-Prot Function]