

Product datasheet for **MC223287**

Tlr9 (NM_031178) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tlr9 (NM_031178) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Tlr9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223287 representing NM_031178 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTTCTCCGTCGAAGGACTCTGCACCCCTTGTCCCTCCTGGTACAGGCTGCAGTGTGGCTGAGACTC
TGGCCCTGGGTACCCTGCCTGCCTTCTACCCTGTGAGCTGAAGCCTCATGGCCTGGTGGACTGCAATTG
GCTGTTCTGAAGTCTGTACCCCGTTTCTCTGCGGCAGCATCTGCTCCAACATCACCCGCTCTCCTTG
ATCTCCAACCGTATCCACCACCTGCACAACCTGACTTCGTCCACCTGTCCAACCTGCGGCAGCTGAACC
TCAAGTGAAGTGTCCACCACCTGGCCTTAGCCCCCTGCACTTCTCTTGCCACATGACCATTGAGCCCGA
AACCTTCTGGCTATGCGTACACTGGAGGAGCTGAACCTTGAGCTATAATGGTATCACCACTGTGCCCGA
CTGCCAGCTCCCTGGTGAATCTGAGCCTGAGCCACACCAACATCCTGGTTCTAGATGCTAACAGCCTCG
CCGGCCTATACAGCCTGCGGTTCTCTTCATGGACGGAACTGCTACTACAAGAACCCTGCACAGGAGC
GGTGAAGGTGACCCAGGCGCCCTCCTGGGCTGAGCAATCTCACCCATCTGTCTCTGAAGTATAACAAC
CTCACAAGGTGCCCGCAACTGCCCCAGCCTGGAGTACCTCCTGGTGTCTATAACCTCATTGTCA
AGCTGGGCTGAAGACCTGGCCAACTGACCTCCCTTCGAGTACTTGATGTGGTGGGAATTGCCGTG
CTGTGACCATGCCCCAATCCCTGTATAGAATGTGGCCAAAAGTCCCTCCACCTGCACCCCTGAGACCTT
CATCACCTGAGCCATCTGGAAGGCTGGTGTGAAGGACAGCTCTCTCCATACACTGAACCTTCTCCTGGT
TCCAAGTCTGGTCAACCTCTCGGTGCTGGACCTAAGCGAGAAGTTTCTCTATGAAAGCATCACCCACAC
CAATGCCTTTCAGAACCTAACCCGCTGCGCAAGCTCAACCTGTCTTCAATTACCGCAAGAAGGTATCC
TTTGCCCGCTCCACCTGGCAAGTTCCTTAAAGAACCTGGTGTCACTGCAGGAGCTGAACATGAACGGCA
TCTTCTCCGCTTGTCTCAACAAGTACACGCTCAGATGGCTGGCCGATCTGCCAAACTCCACACTCTGCA
TCTTCAAATGAACCTCATCAACCAGGCACAGCTCAGCATCTTTGGTACCTTCGAGCCCTTCGCTTTGTG
GACTTGTGAGACAATCGCATCAGTGGGCTTCAACGCTGTGAGAGCCACCCCTGAAGAGGCAGATGATG
CAGAGCAGGAGGAGCTGTTGTCTGCGGATCCTCACCCAGCTCCGCTGAGCACCCCTGCTTCTAAGAAGT
CATGGACAGGTGAAGAAGTCAAGTTCACCATGGACCTGTCTCGGAACAACCTGGTGTGACTATCAAGCCA
GAGATGTTTGTCAATCTCTCACGCTCCAGTGTCTTAGCCTGAGCCACAACCTCCATTGACAGGCTGTCA
ATGGCTCTCAGTTCCTGCCGCTGACTAATCTGCAGGTGCTGGACCTGTCCATAACAAGTGGACTTGTA



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CCACTGGAATCGTTCAGTGAGCTACCACAGTTGCAGGCCCTGGACCTGAGCTACAACAGCCAGCCCTTT
AGCATGAAGGGTATAGGCCACAATTTTCAGTTTTGTGACCCATCTGTCCATGCTACAGAGCCTTAGCCTGG
CACACAATGACATTACATACCCGTGTGCTCCTCACATCTCAACAGCAACTCAGTGAGGTTTCTTGACTTCAG
CGGCAACGGTATGGGCCGATGTGGGATGAGGGGGGCCTTTATCTCCATTTCTTCAAGGCCTGAGTGCC
CTGCTGAAGCTGGACCTGTCTAAAATAACCTGCATATCTCCGGCCCCAGAACCTTGACAACTCCCCA
AGAGCCTGAAGCTGCTGAGCCTCCGAGACAACCTACCTATCTTTCTTAACTGGACCAGTCTGTCTTCT
ACCCAACCTGGAAGTCTAGACCTGGCAGGCAACCAGCTAAAGGCCCTGACCAATGGCACCTGCCTAAT
GGCACCCTCCTCCAGAACTCGATGTAGTACAGCAACAGTATCGTCTCTGTGGTCCCAGCCTTCTTCGCTC
TGGCGGTGAGCTGAAAGAGGTCAACCTCAGCCACAACATTCTCAAGACGGTGGATCGCTCCTGGTTTGG
GCCATTGTGATGAACCTGACAGTTCTAGACGTGAGAAGCAACCCTCTGCACTGTGCCTGTGGGGCAGCC
TTCGTAGACTTACTGTTGGAGGTGCAGACCAAGGTGCCTGGCCTGGCTAATGGTGTGAAGTGTGGCAGCC
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GGACTGCTTTGGCCTTTCACTCTGGCTGTGGCCGTGGGCATGGTGGTGCCTATACTGCACCATCTCTGC
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GGCCCCAACTCTCCCTTATGATGCCTTGTGGTGTTCGATAAGGCACAGAGCGCAGTTGCCGACTGGGT
GTATAACGAGCTGCGGGTGCAGGCTGGAGGAGCGCGCGCGCCGAGCCCTACGCTTGTGTCTGGAGGAC
CGAGATTGGCTGCCTGGCCAGACGCTCTTCGAGAACCTCTGGGCTTCCATCTATGGGAGCCGAAGACTC
TATTTGTGCTGGCCACACGGACCGCTCAGTGGCCTCCTGCGCACCAGCTTCTGCTGGCTCAGCAGCG
CCTGTTGGAAGACCGCAAGGACGTGGTGGTGTGGTGTATCCTGCGTCCGGATGCCACCAGCTCCCCTAT
GTGCGACTGCGCCAGCGTCTCTGCCCCAGAGTGTGCTCTTCTGGCCCCAGCAGCCCAACGGGCAGGGGG
GCTTCTGGGCCAGCTGAGTACAGCCCTGACTAGGGACAACCGCCACTTCTATAACCAGAAGTCTGCCG
GGACCTACAGCAGAATAG

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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1861_e07.zip

Restriction Sites: Sgfl-Mlul

ACCN: NM_031178

Insert Size: 3099 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](#)

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_031178.2](#), [NP_112455.2](#)

RefSeq Size: 3471 bp

RefSeq ORF: 3099 bp

Locus ID: 81897

UniProt ID: [Q9EQU3](#)

Cytogenetics: 9 F1

Gene Summary: Key component of innate and adaptive immunity. TLRs (Toll-like receptors) control host immune response against pathogens through recognition of molecular patterns specific to microorganisms. TLR9 is a nucleotide-sensing TLR which is activated by unmethylated cytidine-phosphate-guanosine (CpG) dinucleotides. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed:18931679, PubMed:21402738, PubMed:14993594, PubMed:17474149, PubMed:25686612, PubMed:18820679). Plays a role in defense against systemic mouse cytomegalovirus infection (PubMed:14993594). Controls lymphocyte response to Helicobacter infection (PubMed:17474149). Upon CpG stimulation, induces B-cell proliferation, activation, survival and antibody production (By similarity).[UniProtKB/Swiss-Prot Function]