

## Product datasheet for **MG227674**

### Tlr2 (NM\_011905) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tlr2 (NM_011905) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tlr2
Synonyms:	Ly105
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MG227674 representing NM\_011905  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCTACGAGCTCTTTGGCTCTTCTGGATCTTGGTGGCCATAACAGTCTCTTCAGCAAACGCTGTTCTG  
 CTCAGGAGTCTCTGTATGTGATGCTTCTGGGGTGTGTATGGCCGCTCCAGGTCTTTCACCTCTATTCC  
 CTCGGACTCACAGCAGCCATGAAAAGCCTTGACCTGTCTTCAACAAGATCACCTACATTGGCCATGGT  
 GACCTCCGAGCGTGTGCGAACCTCCAGGTTCTGATTTTGAAGTCCAGCAGAATCAATACAATAGAGGGAG  
 ACGCCTTTTATTCTCTGGGCAGTCTTGAACATTTGGATTGTCTGATAATCACCTATCTAGTTTATCTTC  
 CTCCTGGTTGGGCCCTTTCTCTTTGAAATACTTAACTTAATGGGAAATCCTTACCAGACACTGGGG  
 GTAACATCGCTTTTCCCAATCTCACAATTTACAAACCCTCAGGATAGGAAATGTAGAGACTTTCAGTG  
 AGATAAGGAGAATAGATTTTGTGGGCTGACTTCTCTCAATGAACTTGAATTAAGGCATTAAGTCTCCG  
 GAATTATCAGTCCCAAAGTCTAAAGTCGATCCGCGACATCCATCACCTGACTCTTCACTTAAGCGAGTCT  
 GCTTTCCTGCTGGAGATTTTGCAGATATTCTGAGTTCTGTGAGATATTTAGAATAAGAGATACTAACT  
 TGGCCAGGTTCCAGTTTTACCCTGCCCCTAGATGAAGTCAGCTCACCGATGAAGAAGCTGGCATTCCG  
 AGGCTCGGTTCTCACTGATGAAAGCTTTAACGAGCTCCTGAAGCTGTTGCGTTACATCTTGGAACTGTCG  
 GAGGTAGAGTTCGACGACTGTACCCTCAATGGGCTCGGCGATTTCAACCCTCGGAGTCAGACGTAGTGA  
 GCGAGCTGGGTAAGTAGAAACAGTCACTATCCGGAGGTTGCATATCCCCAGTTCTATTTGTTTTATGA  
 CCTGAGTACTGTCTATCCCTCCTGGAGAAGGTGAAGCGAATCACAGTAGAGAACAGCAAGGCTTCCCTG  
 GTTCCCTGCTCGTTCTCCAGCATTTAAATCATTAGAATCTTAGACCTCAGCGAAAATCTGATGGTTG  
 AAGAATATTTGAAGAATCAGCCTGTGAAGGAGCCTGGCCTCTACAAACCTTAGTTTTGAGCCAGAA  
 TCAATTTGAGATCAATGCAAAAAACAGGAGATTTTGTGACTCTGAAAAACCTGACCTCCCTTGACATC  
 AGCAGGAACACTTTTCCATCCGATGCCCGACAGCTGTGAGTGGCCAGAAAAGATGCGCTTCTGAATTTGT  
 CCAGTACAGGGATCCGGGTGGTAAAAACGTGCATTCTCAGACGCTGGAGGTGTTGGATGTTAGTAACAA  
 CAATCTTGACTCATTTTCTTTGTTCTTGCCTCGGCTGCAAGAGCTCTATATTTCCAGAAAATAGCTGAAA  
 ACACTCCAGATGCTTCGTTGTTCCCTGTGTTGCTGGTCATGAAAATCAGAGAGAATGCAGTAAGTACTT  
 TCTCTAAAGACCAACTTGGTTCTTTCCAAACTGGAGACTCTGGAAGCAGGCGACAACCACTTTGTTTG  
 CTCCTGCGAACTCTATCTTTACTATGGAGACGCCAGCTCTGGCTCAAATCCTGGTTGACTGGCCAGAC  
 AGCTACCTGTGTGACTCTCCGCCTCGCCTGCACGCCACAGGCTTCAGGATGCCCGGCCCTCCGTCTTGG  
 AATGTCACCAGGCTGCACTGGTGTCTGGAGTCTGCTGTGCCCTTCTCCTGTTGATCTTGCTCGTAGGTG  
 CCTGTGCCACCATTTCCACGGGCTGTGGTACCTGAGAATGATGTGGGCGTGGCTCCAGGCCAAGAGGAAG  
 CCCAAGAAAGCTCCCTGCAGGGACGTTTGTATGATGCCTTTGTTTCTACAGTGAGCAGGATCCCAT  
 GGGTGGAGAACCTCATGGTCCAGCAGCTGGAGAATCTGACCCGCCCTTAAAGCTGTGTCTCCACAAGCG  
 GGACTTCGTTCCGGGCAATGGATCATTGACAACATCATCGATTCCATCGAAAAGAGCCACAAAACCTGTG  
 TTCGTGCTTTCTGAGAACTTCGTACGGAGCGAGTGGTGAAGTACGAACCTGGACTTCTCCCACTTCAGGC  
 TCTTTGACGAGAACACGACGCGCCATCCTTGTGTTGCTGGAGCCATTGAGAGGAAAGCCATTCCCA  
 GCGCTTCTGCAAACTGCGCAAGATAATGAACACCAAGACCTACCTGGAGTGGCCCTTGGATGAAGGCCAG  
 CAGGAAGTGTGTTGGTAAATCTGAGAACTGCAATAAAGTCC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >MG227674 representing NM\_011905  
Red=Cloning site Green=Tags(s)

MLRALWLFWILVAITVLFVSKRCSAQESLSCDASGVCDGRSRSFTSIPSGLTAAMKSLDLSFNKITYIGHG  
DLRACANLQVLILKSSRINTIEGDAFYSLGSLEHLDSLSDNHLSSLSSSWFGPLSSLKYLNLMGNPYQTLG  
VTSLFPNLTNLQTLRIGNVETFSEIRRIDFAGL TSLNELEIKALSLRNYQSQSLKSIRDIIHLLHLSES  
AFLLEIFADILSSVRYLELRDTNLARFQFSPLPVDEVSSPMKKLAFRGSVLTDESFNELLKLLRYIELS  
EVEFDDCTLNGLGDFNPSESDVSELGKVETVTIRRLHIPQFYLYDLSTVYSSLLEKVKRITVENSKVFL  
VPCSFSQHLKSLEFLDLSENLMVEEYLNKNSACKGAWPPLQTLVLSQNHLSRMQKTGEILLTLKNLTSLDI  
SRNTFHPMPDSCQWPEKMRFLNLSSTGIRVVKTCIPQTLEVL DVSNLDSFSLFLPRLQELYISRNLK  
TLPDASLFPVLLVMKIRENAVSTFSKDQLGSFPKLETLEAGDNHFVCSCELLSFTMETPALAQILVDWPD  
SYLCDSPPRLHGHRLQDARPSVLECHQAALVSGVCCALLLLILLV GALCHHFHGLWYLRMMWAWLQAKRK  
PKKAPCRDVCYDAFVSYSEQDSHWVENLMVQLENSDPPFKLCLHKRDFVPGKWIIDNIIDSIEKSHKTV  
FVLS ENFVRSEWCKYELDFSHFRLFDENNDAAILV LLEPIERKAIPQRFCKLRKIMNTKTYLEWPLDEGQ  
QEVFWVNLRTAIKS

TRTRPLE - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2011\\_h10.zip](https://cdn.origene.com/chromatograms/ja2011_h10.zip)

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_011905

ORF Size: 2352 bp

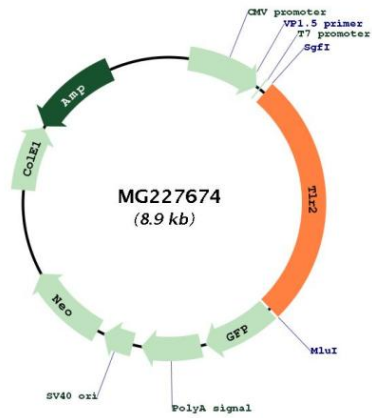
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_011905.2</a>
<b>RefSeq Size:</b>	2874 bp
<b>RefSeq ORF:</b>	2355 bp
<b>Locus ID:</b>	24088
<b>UniProt ID:</b>	<a href="#">Q9QUN7</a>
<b>Cytogenetics:</b>	3 E3
<b>Gene Summary:</b>	<p>Cooperates with LY96 to mediate the innate immune response to bacterial lipoproteins and other microbial cell wall components. Cooperates with TLR1 or TLR6 to mediate the innate immune response to bacterial lipoproteins or lipopeptides. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (By similarity) (PubMed:15690042). May also promote apoptosis in response to lipoproteins (By similarity). Forms activation clusters composed of several receptors depending on the ligand, these clusters trigger signaling from the cell surface and subsequently are targeted to the Golgi in a lipid-raft dependent pathway. Forms the cluster TLR2:TLR6:CD14:CD36 in response to diacylated lipopeptides and TLR2:TLR1:CD14 in response to triacylated lipopeptides (By similarity). Recognizes M.tuberculosis major T-antigen EsxA (ESAT-6) which inhibits downstream MYD88-dependent signaling (PubMed:17486091). Acts as the major receptor for M.tuberculosis lipoproteins LprA, LprG, LpqH and PhoS1 (pstS1), in conjunction with TLR1 and for some but not all lipoproteins CD14 and/or CD36. The lipoproteins act as agonists to modulate antigen presenting cell functions in response to the pathogen (PubMed:19362712). Recombinant MPT83 from M.tuberculosis stimulates secretion of cytokines (TNF-alpha, IL-6 and IL-12p40) by mouse macrophage cell lines in a TLR2-dependent fashion, which leads to increased host innate immunity responses against the bacterium (PubMed:22174456). Lung macrophages which express low levels of TLR2 respond poorly to stimulation by M.tuberculosis LpqH (PubMed:19362712). Required for normal uptake of M.tuberculosis, a process that is inhibited by M.tuberculosis LppM (PubMed:27220037). Interacts with TICAM2 (By similarity).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MG227674