

Product datasheet for **MG226857**

Tlr1 (NM_030682) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tlr1 (NM_030682) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tlr1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG226857 representing NM_030682
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG226857 representing NM_030682
 Red=Cloning site Green=Tags(s)

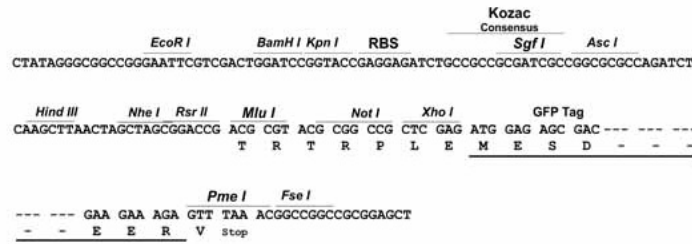
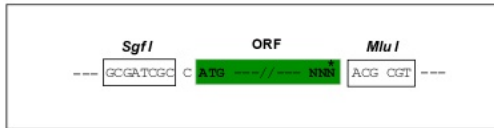
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 LSKLRVLI MSYNRLQYLNI SVFKFNTELEYLDL SHNELKVILCHPTVSLKHLDL SFNAFDALPICKEFGN
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 YPESSRG TALRDFHMSPLSCDTVLLTVTIGATMLVLA VTGAFLCLYFDLPWYVRMLCQWTQTRHRARHIP
 LEELQRNLQFHAFVSYS GHDSA WVKNE LLPNLEKDDIQICLHERNFVPGK SIVENI INFIEKSYK SIFVL
 SPHF IQSEWCHYEL YFAHNL FHEGSDNL ILLAPIQYSIPTNYHKLK TLM SRRTYLEWPTEKNKHGL
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TRTRPLE - GFP Tag - V

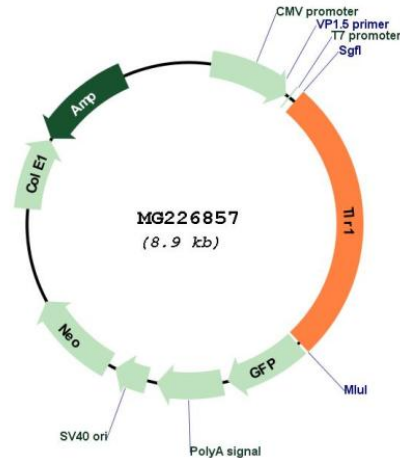
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_030682

ORF Size: 2718 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_030682.2](#), [NP_109607.1](#)

RefSeq ORF: 2388 bp

Locus ID: 21897

UniProt ID: [Q9EPQ1](#)

Cytogenetics: 5 33.53 cM

Gene Summary:

Participates in the innate immune response to microbial agents. Specifically recognizes diacylated and triacylated lipopeptides. Cooperates with TLR2 to mediate the innate immune response to bacterial lipoproteins or lipopeptides. Forms the activation cluster TLR2:TLR1:CD14 in response to triacylated lipopeptides, this cluster triggers signaling from the cell surface and subsequently is targeted to the Golgi in a lipid-raft dependent pathway. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (By similarity). Acts as a coreceptor for M.tuberculosis lipoproteins LprG, LpqH and PhoS1 (pstS1), in conjunction with TLR2 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).[UniProtKB/Swiss-Prot Function]