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Product datasheet for RC207597

TLR2 (NM_003264) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TLR2 (NM_003264) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TLR2
Synonyms:	CD282; TIL4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC207597 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCACATACTTTGTGGATGGTGTGGGTCTTGGGGGTCATCATCAGCCTCTCCAAGGAAGAATCCTCCA
ATCAGGCTTCTCTGTCTTGTGACCGCAATGGTATCTGCAAGGGCAGCTCAGGATCTTTAAACTCCATTCC
CTCAGGGCTCACAGAAGCTGTAAAAAGCCTTGACCTGTCCAACAACAGGATCACCTACATTAGCAACAGT
GACCTACAGAGGTGTGTGAACCTCCAGGCTCTGGTGCTGACATCCAATGGAATTAACACAATAGAGGAAG
ATTCTTTTTCTTCCCTGGGCAGTCTTGAACATTTAGACTTATCCTATAATTACTTATCTAATTTATCGTC
TTCCTGGTTCAAGCCCCTTTCTTCTTTAACATTCTTAAACTTACTGGGAAATCCTTACAAAACCCTAGGG
GAAACATCTCTTTTTTCTCATCTCACAAAATTGCAAATCCTGAGAGTGGGAAATATGGACACCTTCACTA
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ATTTTACTGCTGGAGATTTTTGTAGATGTTACAAGTTCCGTGGAATGTTTGGAACTGCGAGATACTGATT
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GTTCCTTGTTTACTTTCACAACATTTAAAATCATTAGAATACTTGGATCTCAGTGAAAATTTGATGGTTG
AAGAATACTTGAAAAATTCAGCCTGTGAGGATGCCTGGCCCTCTCTACAAACTTTAATTTTAAGGCAAAA
TCATTTGGCATCATTGGAAAAAACCGGAGAGACTTTGCTCACTCTGAAAAACTTGACTAACATTGATATC
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CAATCTCAATTTATTTTCTTTGAATTTGCCGCAACTCAAAGAACTTTATATTTCCAGAAATAAGTTGATG
ACTCTACCAGATGCCTCCCTCTTACCCATGTTACTAGTATTGAAAATCAGTAGGAATGCAATAACTACGT
TTTCTAAGGAGCAACTTGACTCATTTCACACACTGAAGACTTTGGAAGCTGGTGGCAATAACTTCATTTG
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GCGCTTCTGCAAGCTGCGGAAGATAATGAACACCAAGACCTACCTGGAGTGGCCCATGGACGAGGCTCAG
CGGGAAGGATTTTGGGTAAATCTGAGAGCTGCGATAAAGTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC207597 protein sequence
Red=Cloning site Green=Tags(s)

MPHTLWMVWVLGVIISLSKEESSNQASLSCDRNGICKGSSGSLNSIPSGLTEAVKSLDLSNNRITYISNS
DLQRCVNLQALVLTSNGINTIEEDSFSSLGSLEHLDLSYNYLSNLSSSWFKPLSSLTFLNLLGNPYKTLG
ETSLFSHLTKLQILRVGNMDTFTKIQRKDFAGLTFLEELEIDASDLQSYEPKSLKSIQNVSHLILHMKQH
ILLLEIFVDVTSSVECLELRDTDLDTFHFSELSTGETNSLIKKFTFRNVKITDESLFQVMKLLNQISGLL
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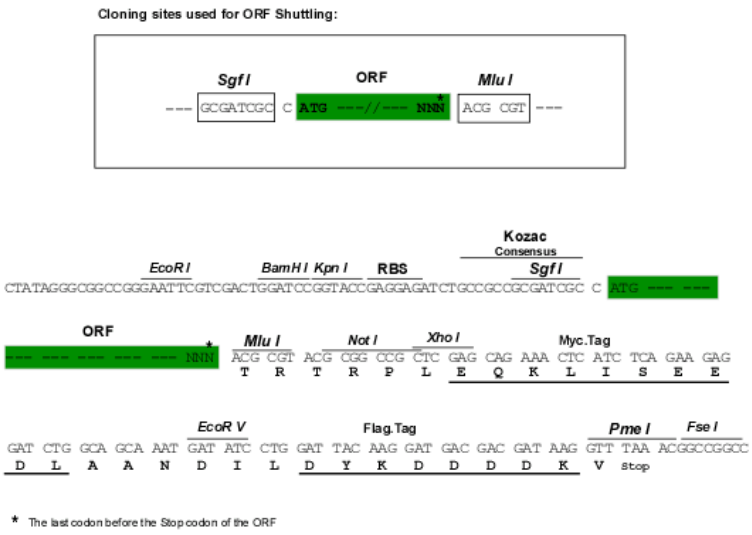
VPCLLSQHLKSLEYLDLSENLMVEEYLKNSACEDAWPSLQTLILRQNHLASLEKTGETLLTLKNLTNIDI
SKNSFHSMPETCQWPEKMKYLNLSSTRIHSVTGCIPKTLEILDVSNNNLNLFSLNLPQLKELYISRNKLM
TLPDASLLPMLLVLKISRNAITTFSKEQLDSFHTLKTLEAGGNNFICSCEFLSFTQEQQALAKVLIDWPA
NYLCDSPSHVRGQQVQDVRLSVSECHRTALVSGMCCALFLLILLTGVLCHRFHGLWYMKMMWAWLQAKRK
PRKAPSRNICYDAFVSYSERDAYWVENLMVQELENFNPPFKLCLHKRDFIPGKWIIDNIIDSIEKSHKTV
FVLSENFVKSEWCKYELDFSHFRLFDENNDAAILILLEPIEKKAIPQRFCKLRKIMNTKTYLEWPMDEAQ
REGFWVNLRAAIKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6237_a05.zip

Restriction Sites: SgfI-MluI

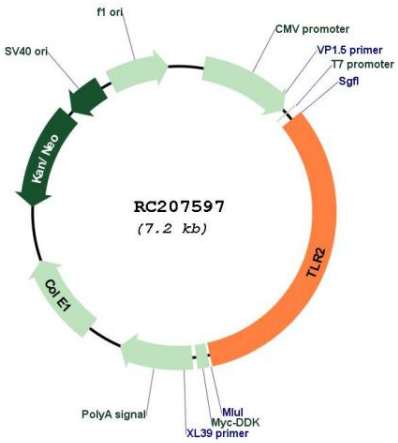
Cloning Scheme:



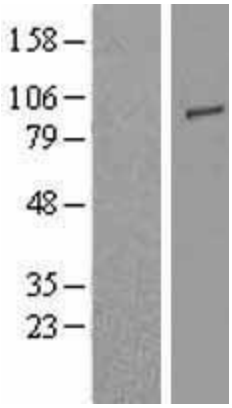
ACCN:	NM_003264
ORF Size:	2352 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_003264.5
RefSeq Size:	3417 bp
RefSeq ORF:	2355 bp
Locus ID:	7097
UniProt ID:	O60603
Cytogenetics:	4q31.3
Domains:	TIR, LRRCT, LRR, LRR_TYP, LRR_BAC, LRR_PS
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Toll-like receptor signaling pathway
MW:	89.8 kDa
Gene Summary:	The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from Drosophila to humans and share structural and functional similarities. This protein is a cell-surface protein that can form heterodimers with other TLR family members to recognize conserved molecules derived from microorganisms known as pathogen-associated molecular patterns (PAMPs). Activation of TLRs by PAMPs leads to an up-regulation of signaling pathways to modulate the host's inflammatory response. This gene is also thought to promote apoptosis in response to bacterial lipoproteins. This gene has been implicated in the pathogenesis of several autoimmune diseases. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]

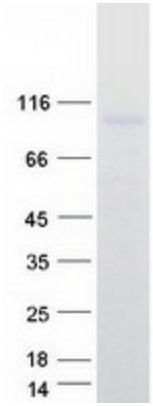
Product images:



Circular map for RC207597



Western blot validation of overexpression lysate (Cat# [LY418800]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207597 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TLR2 protein (Cat# [TP307597]). The protein was produced from HEK293T cells transfected with TLR2 cDNA clone (Cat# RC207597) using MegaTran 2.0 (Cat# [TT210002]).