OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC210497

TLR3 (NM_003265) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TLR3 (NM_003265) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TLR3
Synonyms:	CD283; IIAE2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC210497 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGACAGACTTTGCCTTGTATCTACTTTTGGGGGGGCCTTTTGCCCTTTGGGATGCTGTGTGCATCCT
CCACCACCAAGTGCACTGTTAGCCATGAAGTTGCTGACTGCAGCCACCTGAAGTTGACTCAGGTACCCGA
TGATCTACCCACAAACATAACAGTGTTGAACCTTACCCATAATCAACTCAGAAGATTACCAGCCGCCAAC
TTCACAAGGTATAGCCAGCTAACTAGCTTGGATGTAGGATTTAACACCATCTCAAAACTGGAGCCAGAAT
TGTGCCAGAAACTTCCCATGTTAAAAGTTTTGAACCTCCAGCACAATGAGCTATCTCAACTTTCTGATAA
AACCTTTGCCTTCTGCACGAATTTGACTGAACTCCATCTCATGTCCAACTCAATCCAGAAAATTAAAAAT
AATCCCTTTGTCAAGCAGAAGAATTTAATCACATTAGATCTGTCTCATAATGGCTTGTCATCTACAAAAT
TAGGAACTCAGGTTCAGCTGGAAAATCTCCAAGAGCTTCTATTATCAAACAATAAAATTCAAGCGCTAAA
AAGTGAAGAACTGGATATCTTTGCCAATTCATCTTTAAAAAAATTAGAGTTGTCATCGAATCAAATTAAA
GAGTTTTCTCCAGGGTGTTTTCACGCAATTGGAAGATTATTTGGCCTCTTTCTGAACAATGTCCAGCTGG
GTCCCAGCCTTACAGAGAAGCTATGTTTGGAATTAGCAAACACAAGCATTCGGAATCTGTCTCTGAGTAA
CAGCCAGCTGTCCACCACCAGCAATACAACTTTCTTGGGACTAAAGTGGACAAATCTCACTATGCTCGAT
CTTTCCTACAACAACTTAAATGTGGTTGGTAACGATTCCTTTGCTTGGCTTCCACAACTAGAATATTTCT
TCCTAGAGTATAATAATATACAGCATTTGTTTTCTCACTCTTTGCACGGGCTTTTCAATGTGAGGTACCT
GAATTTGAAACGGTCTTTTACTAAACAAAGTATTTCCCTTGCCTCACTCCCCAAGATTGATGATTTTTCT
TTTCAGTGGCTAAAATGTTTGGAGCACCTTAACATGGAAGATAATGATATTCCAGGCATAAAAAGCAATA
TGTTCACAGGATTGATAAACCTGAAATACTTAAGTCTATCCAACTCCTTTACAAGTTTGCGAACTTTGAC
AAATGAAACATTTGTATCACTTGCTCATTCTCCCTTACACATACTCAACCTAACCAAGAATAAAATCTCA
AAAATAGAGAGTGATGCTTTCTCTTGGTTGGGCCACCTAGAAGTACTTGACCTGGGCCTTAATGAAATTG
GGCAAGAACTCACAGGCCAGGAATGGAGAGGTCTAGAAAATATTTTCGAAATCTATCTTTCCTACAACAA
GTACCTGCAGCTGACTAGGAACTCCTTTGCCTTGGTCCCAAGCCTTCAACGACTGATGCTCCGAAGGGTG
GCCCTTAAAAATGTGGATAGCTCTCCTTCACCATTCCAGCCTCTTCGTAACTTGACCATTCTGGATCTAA
GCAACAACAACATAGCCAACATAAATGATGACATGTTGGAGGGTCTTGAGAAACTAGAAATTCTCGATTT
GCAGCATAACAACTTAGCACGGCTCTGGAAACACGCAAACCCTGGTGGTCCCATTTATTTCCTAAAGGGT
CTGTCTCACCTCCACATCCTTAACTTGGAGTCCAACGGCTTTAACGAGATCCCAGTTGAGGTCTTCAAGG
ATTTATTTGAACTAAAGATCATCGATTTAGGATTGAATAATTTAAACACACTTCCAGCATCTGTCTTTAA
TAATCAGGTGTCTCTAAAGTCATTGAACCTTCAGAAGAATCTCATAACATCCGTTGAGAAGAAGGTTTTC
GGGCCAGCTTTCAGGAACCTGACTGAGTTAGATATGCGCTTTAATCCCTTTGATTGCACGTGTGAAAGTA
TTGCCTGGTTTGTTAATTGGATTAACGAGACCCATACCAACATCCCTGAGCTGTCAAGCCACTACCTTTG
CAACACTCCACCTCACTATCATGGGTTCCCAGTGAGACTTTTTGATACATCATCTTGCAAAGACAGTGCC
CCCTTTGAACTCTTTTTCATGATCAATACCAGTATCCTGTTGATTTTTATCTTTATTGTACTTCTCATCC
ACTTTGAGGGCTGGAGGATATCTTTTTATTGGAATGTTTCAGTACATCGAGTTCTTGGTTTCAAAGAAAT
AGACAGACAGACAGAACAGTTTGAATATGCAGCATATATAATTCATGCCTATAAAGATAAGGATTGGGTC
TGGGAACATTTCTCTTCAATGGAAAAGGAAGACCAATCTCTCAAATTTTGTCTGGAAGAAAGGGACTTTG
AGGCGGGTGTTTTTGAACTAGAAGCAATTGTTAACAGCATCAAAAGAAGCAGAAAAATTATTTTTGTTAT
AACACACCATCTATTAAAAGACCCATTATGCAAAAGATTCAAGGTACATCATGCAGTTCAACAAGCTATT
GAACAAAATCTGGATTCCATTATATTGGTTTTCCTTGAGGAGATTCCAGATTATAAACTGAACCATGCAC
TCTGTTTGCGAAGAGGAATGTTTAAATCTCACTGCATCTTGAACTGGCCAGTTCAGAAAGAACGGATAGG
TGCCTTTCGTCATAAATTGCAAGTAGCACTTGGATCCAAAAACTCTGTACAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210497 protein sequence
Red=Cloning site Green=Tags(s)

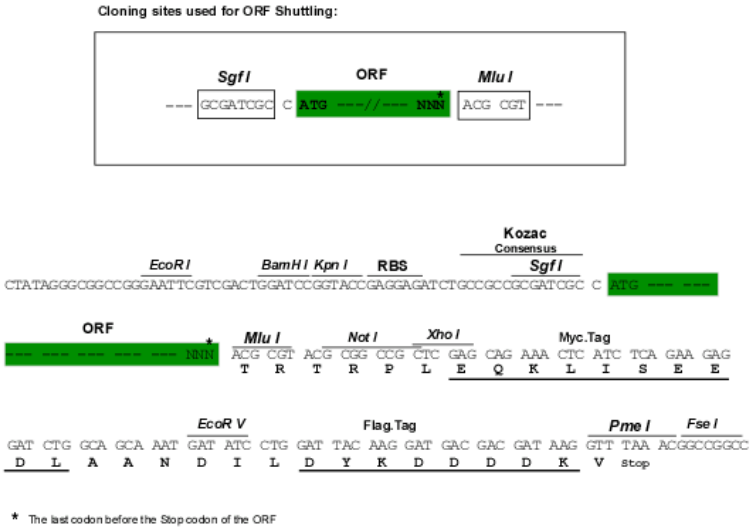
MRQTLPCIYFWGGLLPFGMLCASSTTKCTVSHEVADCSHLKLTQVPDDLPTNITVLNLTHNQLRRLPAAN
FTRYSQLTSLDVGFNTISKLEPELCQKLPMLKVLNLQHNELSQLSDKTFAFCTNLTELHLMSNSIQKIKN
NPFVKQKNLITLDLSHNGLSSTKLGTQVQLENLQELLLSNNKIQALKSEELDIFANSSLKKLELSSNQIK
EFSPGCFHAIGRLFGLFLNNVQLGPSLTEKLCLELANTSIRNLSLSNSQLSTTSNTTFLGLKWTNLTMLD
LSYNNLNVVGNDSFAWLPQLEYFFLEYNNIQHLFSHSLHGLFNVRYLNLKRSFTKQSISLASLPKIDDFS
FQWLKCLEHLNMEDNDIPGIKSNMFTGLINLKYLSLSNSFTSLRTLTNETFVSLAHSPLHILNLTKNKIS
KIESDAFSWLGHLEVLDLGLNEIGQELTGQEWRGLENIFEIYLSYNKYLQLTRNSFALVPSLQRLMLRRV
ALKNVDSSPSPFQPLRNLTILDLSNNNIANINDDMLEGLEKLEILDLQHNNLARLWKHANPGGPIYFLKG
LSHLHILNLESNGFNEIPVEVFKDLFELKIIDLGLNNLNTLPASVFNNQVSLKSLNLQKNLITSVEKKVF
GPAFRNLTELDMRFNPFDCTCESIAWFVNWINETHTNIPELSSHYLCNTPPHYHGFPVRLFDTSSCKDSA
PFELFFMINTSILLIFIFIVLLIHFEGWRISFYWNVSVHRVLGFKEIDRQTEQFEYAAYIIHAYKDKDWV
WEHFSSMEKEDQSLKFCLEERDFEAGVFELEAIVNSIKRSRKIIFVITHHLLKDPLCKRFKVHHAVQQAI
EQNLDSIILVFLEEIPDYKLNHALCLRRGMFKSHCILNWPVQKERIGAFRHKLQVALGSKNSVH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6542_f07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

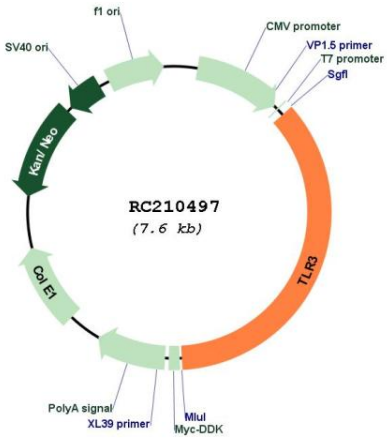


ACCN: NM_003265

ORF Size:	2712 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_003265.3
RefSeq Size:	3057 bp
RefSeq ORF:	2715 bp
Locus ID:	7098
UniProt ID:	O15455
Cytogenetics:	4q35.1
Domains:	TIR, LRRCT, LRR, LRR_TYP, LRR_PS
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Toll-like receptor signaling pathway
MW:	103.8 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. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This receptor is most abundantly expressed in placenta and pancreas, and is restricted to the dendritic subpopulation of the leukocytes. It recognizes dsRNA associated with viral infection, and induces the activation of NF-kappaB and the production of type I interferons. It may thus play a role in host defense against viruses. Use of alternative polyadenylation sites to generate different length transcripts has been noted for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC210497