

Product datasheet for RC207515L2

TLR7 (NM_016562) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TLR7 (NM_016562) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	TLR7
Synonyms:	IMD74; TLR7-like
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC207515).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:

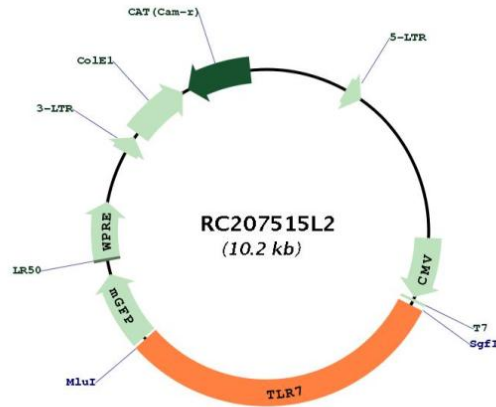


* The last codon before the Stop codon of the ORF.



[View online »](#)

Plasmid Map:



ACCN: NM_016562

ORF Size: 3147 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_016562.3](#)

RefSeq Size: 4992 bp

RefSeq ORF: 3150 bp

Locus ID:	51284
UniProt ID:	Q9NYK1
Cytogenetics:	Xp22.2
Domains:	TIR, LRRCT, LRR, LRR_TYP, LRR_SD22, LRR_BAC
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Toll-like receptor signaling pathway
MW:	120.9 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. The human TLR family comprises 11 members. 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. For the recognition of structural components in foreign microorganisms, the various TLRs exhibit different patterns of expression as well; in this way for example, TLR-3, -7, and -8 are essential in the recognition of single-stranded RNA viruses. TLR7 senses single-stranded RNA oligonucleotides containing guanosine- and uridine-rich sequences from RNA viruses, a recognition occurring in the endosomes of plasmacytoid dendritic cells and B cells. This gene is predominantly expressed in lung, placenta, and spleen, and is phylogenetically related and lies in close proximity to another family member, TLR8, on chromosome X. [provided by RefSeq, Aug 2020]