

## Product datasheet for TP322820

### TLR4 (NM\_138554) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human toll-like receptor 4 (TLR4), transcript variant 1, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>Peptide sequence encoded by RC222820 Blue=ORF Red=Cloning site Green=Tag(s)

MMSASRLAGTLIPAMAFLSCVRPESWEPCEVVPNITYQCMELNFYKIPDNLFPSTKNLDLSFNPLRHL  
GSYSFFSPELQVLDLSRCEIQTIEDGAYQSLSHLSTLILTGNPIQSLALGAFSGLSSLQKLVAETNL  
ASLENFPIGHLKTLKELNVAHNLIQSFKLPEYFSNLTNLEHLDLSSNKIQSIYCTDLRVLHQMPLLNLS  
LDLSLNPMMNFIQPGAFKEIRLHKLTLRNNFDSLNMKTCIQGLAGLEVHRLVLGFEFRNEGNLEKFDKSA  
LEGLCNLTIEEFLAYLDYYLDDIIDLFNCLTNVSSFSLSVSTIERVKDFSYNFGWQHLELVNCKFGQF  
PTLKLKSLKRLTFTSNKGGNAFSEVDLPSLEFLDLSRNGLSFKGCCSQSDFGTTSLKYLDLSFNQVITM  
SSNFLGLEQLEHLDFQHSNLKQMSEFSVFLSLRNLIYLDISHTHTRVAFNGIFNGLSSLEVLKMAGNSF  
QENFLPDIFTELRLNLTFLDLSQCQLEQLSPTAFNSLSSLQVLNMSHNNFFSLDTPYKCLNSLQVLDYS  
LNHIMTSKKQELQHFPSLAFLNLTQNDFACTCEHQSFQWIKDQRQLLVEVERMECATPSDKQGMPVL  
SLNITCQMNKTIIGVSVLSVLVSVVAVLVYKFYFHLMLLAGCIKYGRGENIYDAFVIYSSQDEDWVRN  
ELVKNLEEGVPPFQLCLHYRDFIPGVAIAANIIHEGFHKSRKVIVVVSQHFQSRWCIFEYEAQTWQF  
LSSRAGIIFVLQKVEKTLRQVVELYRLLSRNTYLEWEDSVLGRHIFWRRLRKALLDGKSWNPEGTVG  
TGCNWQEATSI  
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

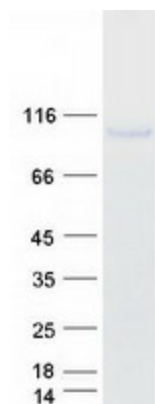
Recombinant protein using RC222820 also available, [TP322820](#)

Tag:	C-Myc/DDK
Predicted MW:	93.2 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.



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<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_612564</a>
<b>Locus ID:</b>	7099
<b>UniProt ID:</b>	<a href="#">O00206</a>
<b>RefSeq Size:</b>	5503
<b>Cytogenetics:</b>	9q33.1
<b>RefSeq ORF:</b>	2517
<b>Synonyms:</b>	ARMD10; CD284; TLR-4; TOLL
<b>Summary:</b>	<p>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 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. In silico studies have found a particularly strong binding of surface TLR4 with the spike protein of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the causative agent of Coronavirus disease-2019 (COVID-19). This receptor has also been implicated in signal transduction events induced by lipopolysaccharide (LPS) found in most gram-negative bacteria. Mutations in this gene have been associated with differences in LPS responsiveness, and with susceptibility to age-related macular degeneration. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2020]</p>
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Pathogenic Escherichia coli infection, Toll-like receptor signaling pathway

**Product images:**

Coomassie blue staining of purified TLR4 protein (Cat# TP322820). The protein was produced from HEK293T cells transfected with TLR4 cDNA clone (Cat# [RC222820]) using MegaTran 2.0 (Cat# [TT210002]).