

Product datasheet for PH322820

TLR4 (NM_138554) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	TLR4 MS Standard C13 and N15-labeled recombinant protein (NP_612564)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC222820
Predicted MW:	93.2 kDa
Protein Sequence:	>RC222820 representing NM_138554 Red =Cloning site Green =Tags(s)

MSASRLAGTLIPAMAFSCVRPESWEPCVEVVPNITYQCMEINFYKIPDNLPFSTKNLDLSFNPLRHLGS
 YSFFSFPELQVLDLSRCEIQTIEDGAYQSLSHLSTLILTGNIQSLALGAFSGLSSLQKLAVETNLASL
 ENFPIGHLKTLKELNVAHNLIQSFKLPEYFSNLTNLEHDLSSNKIQSIYCTDLRVLHQMPLLNLSLDS
 LNPMNFIQPGAFKEIRLHKLTLRNNFDSLNMVMTCTIQGLAGLEVHRLVLGEFRNEGNLEKFDKSALEGLC
 NLTIIEFRLAYLDYYLDDIIDLFNCLTNVSSFSLVSVTIERVKDFSYNFGWQHLELVNCKFGQFPTLKLK
 SLKRLTFTSNKGGNAFSEVDLPSLEFLDLNRNGLSFKGCCSQSDFGTTSLKYLDLSFNGVITMSSNFLGL
 EQLEHLDFOHNSLQMSSEFSVFLSLRNLIYLDISHTHTRVAFNGIFNGLSSLEVLKMGANSFQENFLPDI
 FTELRLTFLDLQSQLEQLSPTAFNSLSSLQVLNMSHNNFFSLDTFPYKCLNSLQVLDYSLNHIMTSKK
 QELQHFPSSLAFLNLTQNDFACTCEHQSFLQWIKDQRLLEVERMECATPSDKQMPVLSLNTCQMNK
 TIIGVSVLSVLVVSVAVLVYKFYFHLMLLAGCIKYGRGENIYDAFVIYSSQDEDWVRNELVKNLEEGVP
 PFQCLCHYRDFIPGVAIAANIIHEGFHKSARKVIVVVSQHFISRWCIFFEYEAQTWQFLSSRAGIIFIVL
 QKVEKTLRLQQVELYRLLSRNTYLEWEDSVLGRHIFWRRRLKALLDGKSWNPEGTVGTGCNWQEATSI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_612564


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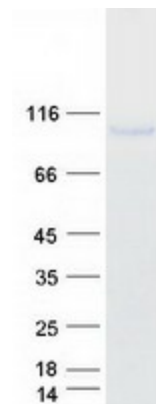
RefSeq Size: 5503
RefSeq ORF: 2514
Synonyms: ARMD10; CD284; TLR-4; TOLL
Locus ID: 7099
UniProt ID: [O00206](#)
Cytogenetics: 9q33.1

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 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]

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: 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]).