



Recombinant Rat Toll-like receptor 4 (Tlr4), partial

Product Code	CSB-CF023603RA
Relevance	Cooperates with LY96 and CD14 to mediate the innate immune response to bacterial lipopolysaccharide (LPS). Acts via MYD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. Also involved in LPS-independent inflammatory responses triggered by free fatty acids, such as palmitate. In complex with TLR6, promotes sterile inflammation in monocytes/macrophages in response to oxidized low-density lipoprotein (oxLDL) or amyloid-beta 42. In this context, the initial signal is provided by oxLDL- or amyloid-beta 42-binding to CD36. This event induces the formation of a heterodimer of TLR4 and TLR6, which is rapidly internalized and triggers inflammatory response, leading to the NF-kappa-B-dependent production of CXCL1, CXCL2 and CCL9 cytokines, via MYD88 signaling pathway, and CCL5 cytokine, via TICAM1 signaling pathway, as well as IL1B secretion. Binds electronegative LDL (LDL-) and mediates the cytokine release induced by LDL
Abbreviation	Recombinant Rat Tlr4 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9QX05
Product Type	Transmembrane Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	≥ 90% as determined by SDS-PAGE.
Sequence	NPCIEVLPNITYQCMDQNLSKIPHDIPYSTKNLDLSFNPLKILRSYSFTNFSQLQ WDLRSRCEIETIEDKAWHGLNQLSTLVLTGNPIKSFSPGSFSGLTNLENLVAVE TKMTSLEGFHIGQLISLKKLNVAHNLHISFKLPEYFSNLTNLEHVDLSYNYIQTIS VKDLQFLREN PQVNLSLDLSLNPIDSIQAQAFQGIRLHELTLRSNFNSSNVLKM CLQNMTGLHVHRLILGEFKNERNLESFDRSVMEGLCNVSIDEFRLTYINHFSDD IYNLNC LANISAMSFTGVHIKHIADVPRHFKWQSLSIIRCHLKPFPKLSLPFLKSW TLTTNREDISFGQLALPSRLRYLDLSRNAMSFRGCCSYSDFGTNNLKYLDLSFN GVILMSANFMGLEELEYLDFQHSTLKKVTEFSVFLSLEKLLYLDISYNTNTKIDFD GIFLGLISLNTLKMAGNSFKDNTLSNVFTNTNTLTFDLDSKCQLEQISRGVFDL YRLQLLNMSHNNLLFLDPSHYKQLYSLRTLDCSFNRIETSKGILQHFPKSLAVF NLTNNSVACICEYQNFLQWVKDQKMFLVNVEQMKCASPIDMKASLVLDFTNST CYIYKTIISVSVVS
Research Area	Immunology
Source	in vitro E.coli expression system
Target Names	Tlr4
Protein Names	CD_antigen: CD284
Expression Region	26-638aa



Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-SUMO-tagged and C-terminal Myc-tagged
Mol. Weight	90.2kDa
Protein Length	Extracellular Domain

Image


(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
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Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
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