

Recombinant Human TLR4, GST-tagged

Cat. No. TLR4-291H Lot. No. (See product label)

SPECIFICATION

Product Overview HumanTLR4 partial ORF (130 aa-201 aa) recombinant protein fused with a GST-tag atN-terminal was expressed in wheat germ.

Species Human

Source Wheat Germ

ProteinLength 130-201 a.a.

Description

The protein encoded by this gene is a member of the Toll-likereceptor (TLR) family which plays a fundamental role in pathogen recognitionand activation of innate immunity. TLRs are highly conserved from Drosophilato humans and share structural and functional similarities. They recognizepathogen-associated molecular patterns (PAMPs) that are expressed oninfectious agents, and mediate the production of cytokines necessary for thedevelopment of effective immunity. The various TLRs exhibit different patternsof expression. This receptor is most abundantly expressed in placenta, and inmyelomonocytic subpopulation of the leukocytes. It has been implicated insignal transduction events induced by lipopolysaccharide (LPS) found in mostgram-negative bacteria. Mutations in this gene have been associated withdifferences in LPS responsiveness. Also, several transcript variants of thisgene have been found, but the protein coding potential of most of them isuncertain.

Form 50mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Molecular Weight 33.55kDa

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Purification	GlutathioneSepharose 4 Fast Flow
Sequences of aminoacids	KLVAVETNLASLENFPIGHLKTLKELNVAHNLIQSFKLPEYFSNLTNLEHLDLSSNKIQ SIYCTDLRVLHQM
Storage	Store at -80°C. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	TLR4 toll-like receptor 4 [Homo sapiens]
Official Symbol	TLR4
Synonyms	TLR4; toll-like receptor 4; TOLL; CD284; TLR-4; ARMD10; toll-like receptor 4; hToll; homolog of Drosophila toll; CD284antigen; OTTHUMP00000022807
Gene ID	7099
mRNA Refseq	NM_003266
Protein Refseq	NP_003257
MIM	603030
UniProt ID	O00206
Chromosome Location	9q33.1
Pathway	Activated TLR4 signalling; Amoebiasis; IKK complex recruitmentmediated by RIP1; Immune System; Influenza A; Innate Immune System; Leishmaniasis;MyD88 cascade initiated on plasma membrane; Pathogenic Escherichia coliinfection; Pertussis;

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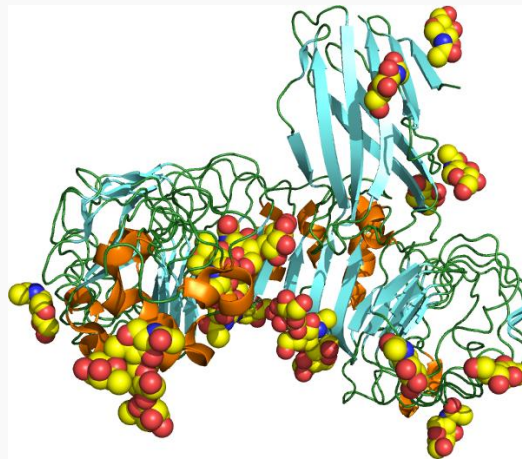
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Rheumatoid arthritis; TRAF6 mediated induction of TAK1 complex; Toll Like Receptor 10 (TLR10) Cascade; Toll Like Receptor 2 (TLR2) Cascade; Toll Receptor Cascades; Toll-like receptor signaling pathway

Function

lipopolysaccharide binding; lipopolysaccharide receptor activity; phosphatidylinositol 3-kinase binding; protein binding; receptor activity; membrane signaling receptor activity

PDB rendering based on 2z64.



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