

Recombinant human TLR4 protein (Active) ab233665

2 References

Description

Product name	Recombinant human TLR4 protein (Active)		
Biological activity	Determined by its ability to bind rhMD-2 in a functional ELISA.		
Purity	>= 95 % SDS-PAGE. >= 95% by HPLC analysis.		
Expression system	HEK 293 cells		
Accession	<u>O00206</u>		
Protein length	Protein fragment		
Animal free	No		
Nature	Recombinant		
Species	Human		
Sequence	ESWEPCVEVVPNITYQCMELNFYKIPDNLPFSTKNLDLSF NPLRHLGSYS FFSFPELQVLDLSRCEIQTIEDGAYQSLSHLSTLILTGNPIQS LALGAFS GLSSLQKLVAVETNLASLENFPIGHLKTLKELNVAHNLIQS FKLPEYFSN LTNLEHLDLSSNKIQSIYCTDLRVLHQMPLLNLSLDLSLNP MNFIQPGAF KEIRLHKLTLRNNFDSLNMKTCIQGLAGLEVHRLVLGEFR NEGNLEKFD KSALEGLCNLTIEEFRLAYLDYLDIDLFNCLTNVSSFSLV SVTIERV KDFSYNFGWQHLELVNCKFGQFPTLKLKSLKRLTFTSNK GGNAFSEVDLP SLEFLDLNRGLSFKGCCSQSDFGTTSLKYLDLSFNGVIT MSSNFLGLEQ LEHLDFQHSLNKQMSEFSVFLSLRNLIMDISHTHTRVAFN GIFNGLSSL EVLKMAGNSFQENFLPDIFTELRLNLTFLDLSQCQLEQLSP TAFNSLSSLQ VLNMSHNNFFSLDTFPYKCLNSLQVLDYSLNHIMTSKKQE LQHFPSSLAF LNLTQNDFACTCEHQSFQWIKDQRQLLVEVERMECATP SDKQGMPVLSL NITCQMNKT		

Predicted molecular weight	69 kDa
Amino acids	24 to 632
Additional sequence information	Extracellular domain.

Specifications

Our **Abpromise guarantee** covers the use of **ab233665** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE HPLC
Form	Lyophilized
Additional notes	Migrates with an apparent molecular mass of approximately 90-100 kDa by SDS-PAGE gel, under reducing and non-reducing conditions.

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. This product is an active protein and may elicit a biological response in vivo, handle with caution.
Reconstitution	For lot specific reconstitution information please contact our Scientific Support Team.

General Info

Function	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 Ni(2+). These responses require non-conserved histidines and are, therefore, species-specific.
Tissue specificity	Highly expressed in placenta, spleen and peripheral blood leukocytes. Detected in monocytes, macrophages, dendritic cells and several types of T-cells.
Involvement in disease	Genetic variation in TLR4 is associated with age-related macular degeneration type 10 (ARMD10) [MIM:611488]. ARMD is a multifactorial eye disease and the most common cause of irreversible vision loss in the developed world. In most patients, the disease is manifest as ophthalmoscopically visible yellowish accumulations of protein and lipid that lie beneath the retinal pigment epithelium and within an elastin-containing structure known as Bruch membrane.
Sequence similarities	Belongs to the Toll-like receptor family. Contains 18 LRR (leucine-rich) repeats. Contains 1 LRRCT domain. Contains 1 TIR domain.
Domain	The TIR domain mediates interaction with NOX4.
Post-translational modifications	N-glycosylated. Glycosylation of Asn-526 and Asn-575 seems to be necessary for the expression of TLR4 on the cell surface and the LPS-response. Likewise, mutants lacking two or more of the other N-glycosylation sites were deficient in interaction with LPS.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors