# abcam

## Product datasheet

## Recombinant Human TLR4 protein ab159717

## 1 Image

### **Description**

Product name Recombinant Human TLR4 protein

Expression system Wheat germ

Protein length Full length protein

Animal free No

**Nature** Recombinant

**Species** Human

**Sequence** MPLLNLSLDLSLNPMNFIQPGAFKEIRLHKLTLRNNFDSLN

**VMKTCIQGL** 

AGLEVHRLVLGEFRNEGNLEKFDKSALEGLCNLTIEEFRL

AYLDYYLDDI

**IDLFNCLTNVSSFSLVSVTIERVKDFSYNFGWQHLELVNCK** 

**FGQFPTLKL** 

KSLKRLTFTSNKGGNAFSEVDLPSLEFLDLSRNGLSFKGC

CSQSDFGTTS

LKYLDLSFNGVITMSSNFLGLEQLEHLDFQHSNLKQMSEF

**SVFLSLRNLI** 

YLDISHTHTRVAFNGIFNGLSSLEVLKMAGNSFQENFLPDIF

**TELRNLTF** 

LDLSQCQLEQLSPTAFNSLSSLQVLNMSHNNFFSLDTFPY

**KCLNSLQVLD** 

YSLNHIMTSKKQELQHFPSSLAFLNLTQNDFACTCEHQSF

LQWIKDQRQL

LVEVERMECATPSDKQGMPVLSLNITCQMNKTIIGVSVLS

VLVVSVVAVL

VYKFYFHLMLLAGCIKYGRGENIYDAFVIYSSQDEDWVRNE

**LVKNLEEGV** 

PPFQLCLHYRDFIPGVAIAANIIHEGFHKSRKVIVVVSQHFIQ

SRWCIFE

YEIAQTWQFLSSRAGIIFIVLQKVEKTLLRQQVELYRLLSRNT

**YLEWEDS** 

VLGRHIFWRRLRKALLDGKSWNPEGTVGTGCNWQEATSI

Amino acids 1 to 639

Tags GST tag N-Terminus

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#### **Specifications**

Our Abpromise guarantee covers the use of ab159717 in the following tested applications.

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

**Applications** Western blot

**ELISA** 

Form Liquid

**Additional notes** 

## **Preparation and Storage**

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

#### 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.

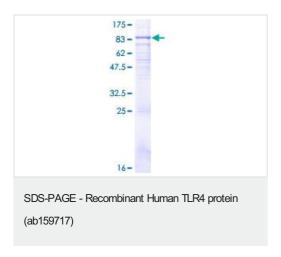
Post-translational N-glycosylated. Glycosylation of Asn-526 and Asn-575 seems to be necessary for the expression

modifications 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.

**Cellular localization** Membrane.

#### **Images**



ab159717 on a 12.5% SDS-PAGE stained with Coomassie Blue.

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

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