

### PE Anti-TLR4 antibody [MTS510] $\alpha$ b95563

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#### Overview

<b>Product name</b>	PE Anti-TLR4 antibody [MTS510]
<b>Description</b>	PE Rat monoclonal [MTS510] to TLR4
<b>Host species</b>	Rat
<b>Conjugation</b>	PE. Ex: 488nm, Em: 575nm
<b>Specificity</b>	The MTS510 monoclonal antibody co-immunoprecipitates MD-2 (~30 kDa) and TLR4 (~100 kDa), and preferentially reacts with TLR4 that is associated with MD-2.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse
<b>Immunogen</b>	Full length native protein (purified) corresponding to Mouse TLR4.
<b>Positive control</b>	3-day thioglycolate-induced BALB/c macrophages; mouse peritoneal exudate cells
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C.
<b>Storage buffer</b>	<p>pH: 7.20</p> <p>Preservative: 0.09% Sodium azide</p> <p>Constituents: 0.87% Sodium chloride, PBS</p>
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	MTS510
<b>Isotype</b>	IgG2a
<b>Light chain type</b>	kappa

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab95563 in the following tested applications.

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

Application	Abreviews	Notes
Flow Cyt		Use 0.5µg for 10 <sup>5-8</sup> cells. Staining the cell sample in a final volume of 100 µL is recommended.

## Target

### 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.

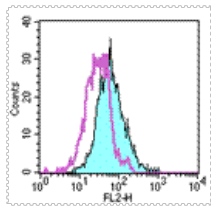
### Post-translational modifications

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.

### Cellular localization

Membrane.

## Images



Flow Cytometry - PE Anti-TLR4 antibody [MTS510]  
(ab95563)

Staining of 3-day thioglycolate-induced BALB/c macrophages with 0.25 µg of Rat IgG2a Isotype Control PE (open histogram) or 0.25 µg of ab95563 (filled histogram). Cells were pre-incubated with Anti-Mouse CD16/CD32. Total viable cells were used for analysis.

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

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