Anti-TLR4/MD2 Complex antibody [MTS510] ab95562

9 References

Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-TLR4/MD2 Complex antibody [MTS510]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rat monoclonal [MTS510] to TLR4/MD2 Complex</td>
</tr>
<tr>
<td>Host species</td>
<td>Rat</td>
</tr>
<tr>
<td>Specificity</td>
<td>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.</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: Flow Cyt, IHC-Fr, IP, WB, IHC-P</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Mouse, Rat</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Toll-like receptor 4 (TLR4)/MD-2 complex of Mouse origin</td>
</tr>
<tr>
<td>Positive control</td>
<td>Thioglycolate-induced mouse peritoneal exudate cells (PECs)</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.</td>
</tr>
<tr>
<td>Storage buffer</td>
<td>pH: 7.20</td>
</tr>
<tr>
<td></td>
<td>Preservative: 0.09% Sodium azide</td>
</tr>
<tr>
<td></td>
<td>Constituents: 0.87% Sodium chloride, PBS</td>
</tr>
<tr>
<td>Purity</td>
<td>Protein G purified</td>
</tr>
<tr>
<td>Clonality</td>
<td>Monoclonal</td>
</tr>
<tr>
<td>Clone number</td>
<td>MTS510</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG2a</td>
</tr>
<tr>
<td>Light chain type</td>
<td>kappa</td>
</tr>
</tbody>
</table>

Applications

Our Abpromise guarantee covers the use of ab95562 in the following tested applications.

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

Abreviews
Flow Cyt
Use 1µg for 10^5-8 cells.
Staining the cell sample in a final volume of 100 µL is recommended.

IHC-Fr
Use at an assay dependent concentration.

IP
Use at an assay dependent concentration.

WB
Use at an assay dependent concentration. Predicted molecular weight: 95 kDa. PubMed: 28714001

IHC-P
Use at an assay dependent concentration. PubMed: 28714001

Notes
ab18450 - Rat monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

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.

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