

Product datasheet

Anti-TLR4 antibody [HTA125] ab8376

[30 References](#) [1 Image](#)

Overview

Product name	Anti-TLR4 antibody [HTA125]
Description	Mouse monoclonal [HTA125] to TLR4
Host species	Mouse
Specificity	<p>This antibody recognises the human Toll like receptor 4 (TLR4) cell surface antigen. TLR4 has been demonstrated to act as alpha receptor for LPS on human monocytes and macrophages. TLR4 signalling of LPS stimulation requires the presence of the MD-2 molecule. TLR4 is weakly expressed by resting cells, but is upregulated following stimulation with LPS. We do not guarantee WB since we receive variable results from our customers and cannot make this antibody work in our hands in WB in denaturing and reducing conditions. The immunogen is a full-length immunogen so we suspect that to get the product to work in WB, non-reducing or native WB could be a better option. THP1 monocytes or macrophage are good positive controls and HeLa/Hek293 should be suitable negative/low expression controls. Membrane preparation may be better than whole cell as expression levels may not be that high in some samples. We welcome any further feedback in WB by participating to our AbTrial program.</p>
Tested applications	Suitable for: IP, Flow Cyt
Species reactivity	Reacts with: Rat, Guinea pig, Human, Pig, Rhesus monkey
Immunogen	Tissue, cells or virus corresponding to TLR4. Ba/F3 cell line expressing TLR4
General notes	<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&As</p>

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	Preservative: 0.09% Sodium azide Constituent: PBS

Purity	Protein G purified
Clonality	Monoclonal
Clone number	HTA125
Myeloma	Sp2/0
Isotype	IgG2a

Applications

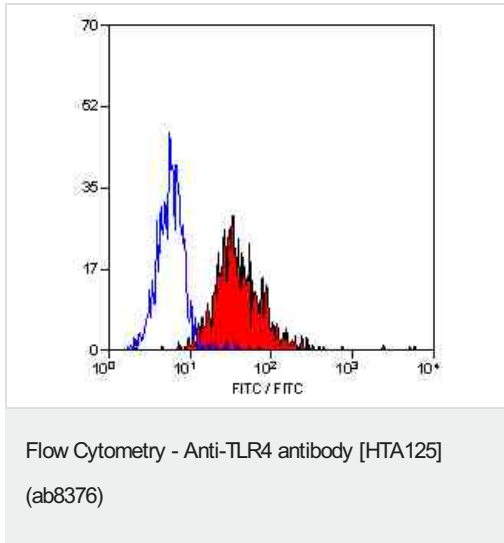
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab8376 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
Flow Cyt		1/10 - 1/25. Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood. Method sheets are available on request.

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



Staining of human peripheral blood monocytes with ab8376.

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