abcam

Product datasheet

Anti-CD14 antibody [EPR3652] ab133503



3 References 7 Images

Overview

Product name Anti-CD14 antibody [EPR3652]

Description Rabbit monoclonal [EPR3652] to CD14

Host species Rabbit

Tested applications Suitable for: Flow Cyt, IHC-P

Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Human CD14 aa 1-100 (extracellular). The exact sequence is proprietary.

Positive control IHC-P: Human colon and tonsil tissues. Flow Cytometry: Human PBMCs

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

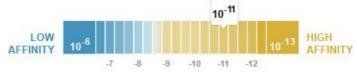
Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

 $K_D = 3.10 \times 10^{-11} M$ Dissociation constant (K_D)



Learn more about K_D

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

Purity Protein A purified

ClonalityMonoclonalClone numberEPR3652

Isotype IgG

Applications

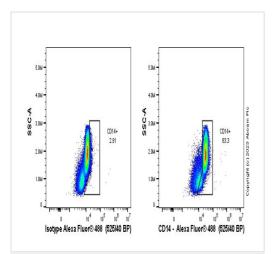
Images

The Abpromise guarantee Our Abpromise guarantee covers the use of ab133503 in the following tested applications.

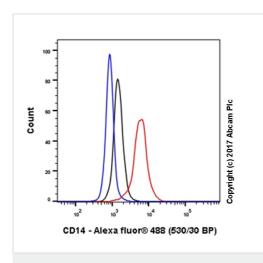
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		1/100. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
IHC-P		1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols. For unpurified use at 1/100 - 1/250.

Target		
Function	Cooperates with MD-2 and TLR4 to mediate the innate immune response to bacterial lipopolysaccharide (LPS). Acts via MyD88, TlRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. Up-regulates cell surface molecules, including adhesion molecules.	
Tissue specificity	Expressed strongly on the surface of monocytes and weakly on the surface of granulocytes; also expressed by most tissue macrophages.	
Sequence similarities	Contains 11 LRR (leucine-rich) repeats.	
Post-translational modifications	N- and O- glycosylated. O-glycosylated with a core 1 or possibly core 8 glycan.	
Cellular localization	Cell membrane.	



Flow Cytometry - Anti-CD14 antibody [EPR3652] (ab133503)



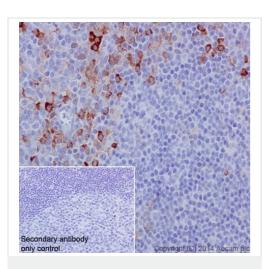
Flow Cytometry - Anti-CD14 antibody [EPR3652] (ab133503)

Flow cytometry staining of human peripheral blood mononuclear cells (PBMCs) with ab133503 (right) or Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control (left). PBMCs were incubated for 30 min on ice in 1x PBS containing 10 μ g/ml human IgG and 10 % normal goat serum to block FC receptors and nonspecific protein-protein interaction followed by the antibody ab133503 or Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control (1x 10⁶ in 100 μ l at 1.0 μ g/ml (1/2300)) for 30min on ice.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min on ice Acquisition of >30000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter. Events were gated on CD3 and CD19 negative cells.

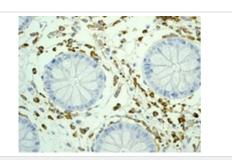
Human whole blood was stained with anti-CD14 antibody ab133503 (red line). In brief, the erythrocytes were lysed and the cells were then stained with anti-CD14 (ab133503) for 30 min at 4°C. The secondary antibody used was Alexa Fluor® 488 goat antirabbit lgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 4°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (ab172730) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >30,000 total events were collected. Gating strategy - peripheral blood monocytes



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD14 antibody
[EPR3652] (ab133503)

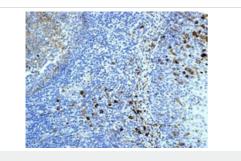
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling CD14 with purified ab133503 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD14 antibody
[EPR3652] (ab133503)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue labelling CD14 with unpurified ab133503 at a dilution of 1/100.

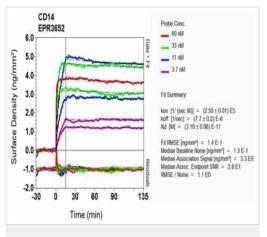
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD14 antibody
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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling CD14 with unpurified ab133503 at a dilution of 1/100.

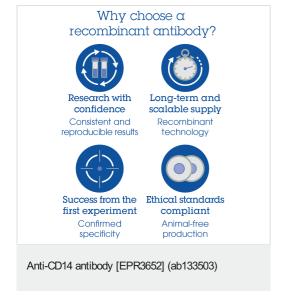
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



OI-RD Scanning - Anti-CD14 antibody [EPR3652] (ab133503)

Equilibrium disassociation constant (K_D) Learn more about K_D

Click here to learn more about K_D



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