

## Product datasheet

# Anti-CD14 antibody [EPR3653] - Low endotoxin, Azide free ab214438

Recombinant RabMAb

★★★★☆ [1 Abreviews](#) [4 References](#) [6 Images](#)

### Overview

<b>Product name</b>	Anti-CD14 antibody [EPR3653] - Low endotoxin, Azide free
<b>Description</b>	Rabbit monoclonal [EPR3653] to CD14 - Low endotoxin, Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Human colon, placenta and tonsil tissue. WB: Human tonsil, SW480 and PBMCI lysates.
<b>General notes</b>	ab214438 is the carrier-free version of <a href="#">ab133335</a> .

Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

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](#).

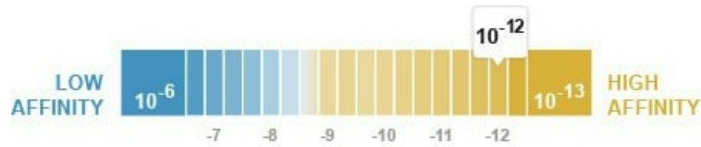
Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

Our **Low endotoxin, azide-free formats** have low endotoxin level ( $\leq 1$  EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

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

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Dissociation constant (K<sub>D</sub>)</b>	K <sub>D</sub> = 4.70 x 10 <sup>-12</sup> M



[Learn more about K<sub>D</sub>](#)

<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3653
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab214438 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
WB		Use at an assay dependent concentration. Detects a band of approximately 53 kDa (predicted molecular weight: 40 kDa).
IHC-P	★ ★ ★ ★ ☆ (1)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <a href="#">IHC antigen retrieval protocols</a> .

## Target

<b>Function</b>	Cooperates with MD-2 and TLR4 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. Up-regulates cell surface molecules, including adhesion molecules.
<b>Tissue specificity</b>	Expressed strongly on the surface of monocytes and weakly on the surface of granulocytes; also expressed by most tissue macrophages.
<b>Sequence similarities</b>	Contains 11 LRR (leucine-rich) repeats.

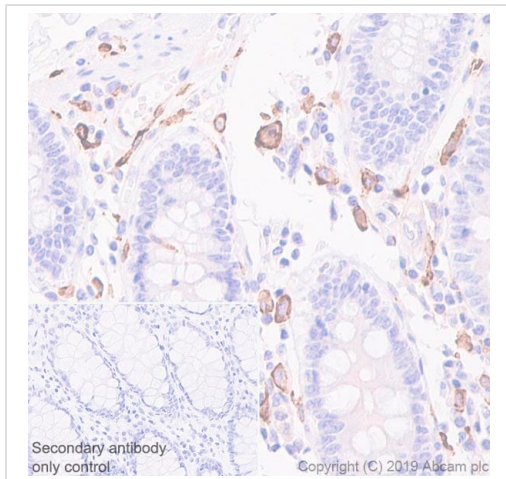
**Post-translational modifications**

N- and O- glycosylated. O-glycosylated with a core 1 or possibly core 8 glycan.

**Cellular localization**

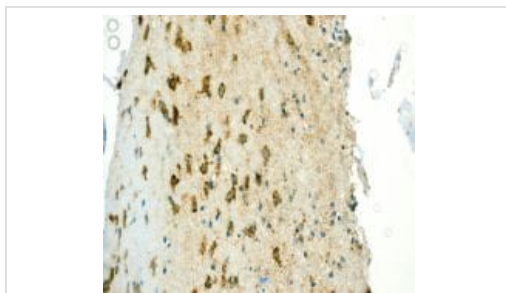
Cell membrane.

**Images**



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue sections labeling CD14 with purified **ab133335** at 1/2000 dilution (0.04 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab133335**)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD14 antibody [EPR3653] - Low endotoxin, Azide free (ab214438)

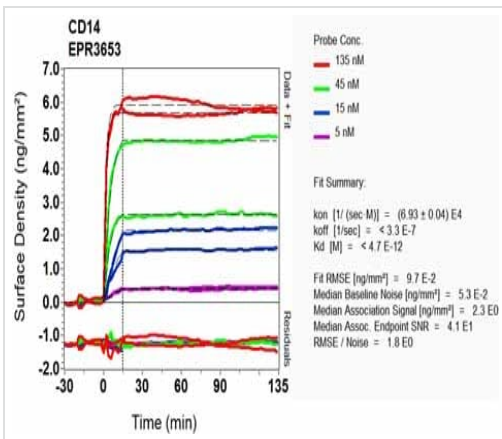


Immunohistochemical analysis of Formalin-fixed, paraffin-embedded Human placenta tissue labelling CD14 with **ab133335** (unpurified) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab133335**).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD14 antibody [EPR3653] - Low endotoxin, Azide free (ab214438)

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



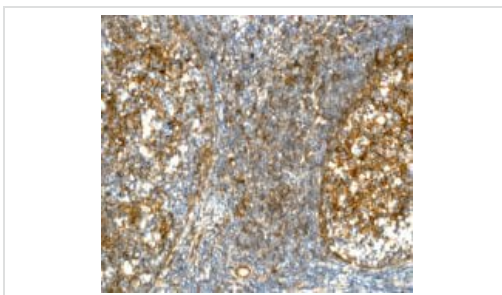
OI-RD Scanning - Anti-CD14 antibody [EPR3653] - Low endotoxin, Azide free (ab214438)

Equilibrium disassociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab133335](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD14 antibody [EPR3653] - Low endotoxin, Azide free (ab214438)

This IHC data was generated using the same anti-CD14 antibody clone, EPR3653, in a different buffer formulation (cat# [ab133335](#)) (unpurified).

Immunohistochemical analysis of Formalin-fixed, paraffin-embedded Human tonsil tissue labelling CD14 with [ab133335](#) at 1/500 dilution.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

Tissue Microarray (TMA) data for ab133335			
Normal tissue samples		Malignant tissue samples	
Human cardiac muscle	x	Human placenta	x (immune cells ✓)
Human cerebrum	x	Human skeletal muscle	x (immune cells ✓)
Human colon	x (immune cells ✓)	Human skin	x (immune cells ✓)
Human endometrium	x (immune cells ✓)	Human spleen	x (immune cells ✓)
Human kidney	x (immune cells ✓)	Human stomach	x (immune cells ✓)
Human liver	x (immune cells ✓)	Human testis	x (immune cells ✓)
Human lung	x (immune cells ✓)	Human thyroid	x
Human mammary gland	x (immune cells ✓)	Human tonsil	x (immune cells ✓)
Human pancreas	x (immune cells ✓)		
		Clear cell carcinoma of human kidney	x (immune cells ✓)
		Human bladder cancer	
		Human breast carcinoma	x (immune cells ✓)
		Human cervical carcinoma	x (immune cells ✓)
		Human colon carcinoma	x (immune cells ✓)
		Human endometrial carcinoma	x (immune cells ✓)
		Human gastric adenocarcinoma	x (immune cells ✓)
		Human glioma	✓
		Human hepatocellular carcinoma	x (immune cells ✓)
		Human lung carcinoma	x (immune cells ✓)
		Human ovarian carcinoma	x (immune cells ✓)
		Human pancreatic carcinoma	x (immune cells ✓)
		Human prostatic hyperplasia	x (immune cells ✓)
		Human thyroid carcinoma	x

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD14 antibody [EPR3653] - Low endotoxin, Azide free (ab214438)

Tissue Microarrays stained for " Anti-CD14 antibody [EPR3653]" using "[ab133335](#)" in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negative (cross mark) staining per sample type tested. The sections were pre-treated using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes. The sections were incubated with [ab133335](#) for 30 mins at room temperature followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-CD14 antibody [EPR3653] - Low endotoxin,  
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**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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