

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

Recombinant RabMAb

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

Overview

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

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

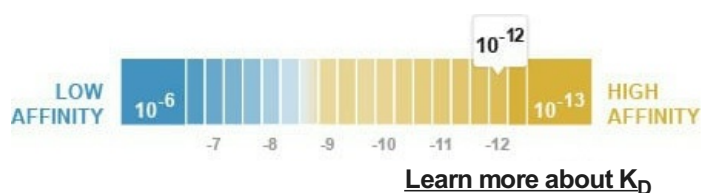
Our **Low endotoxin, azide-free formats** have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

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. Do Not Freeze.
Dissociation constant (K_D)	K _D = 4.70 x 10 ⁻¹² M



Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR3653
Isotype	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 <u>IHC antigen retrieval protocols</u> .

Target

Function 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.

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.

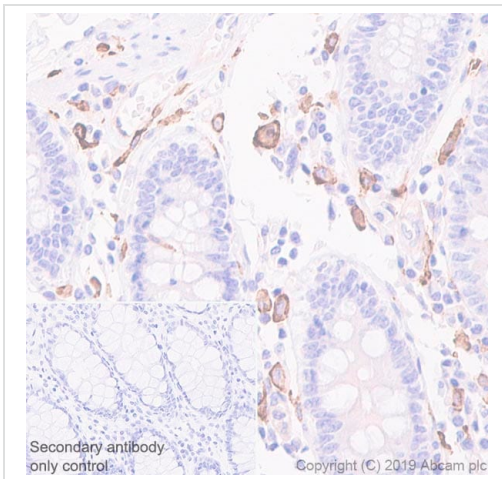
Post-translational modifications

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

Cellular localization

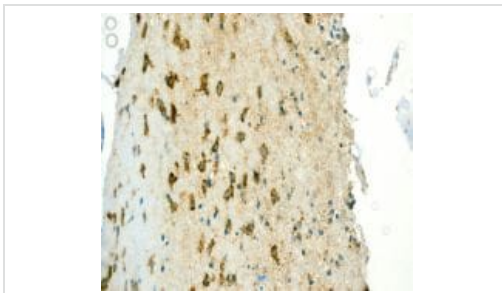
Cell membrane.

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)

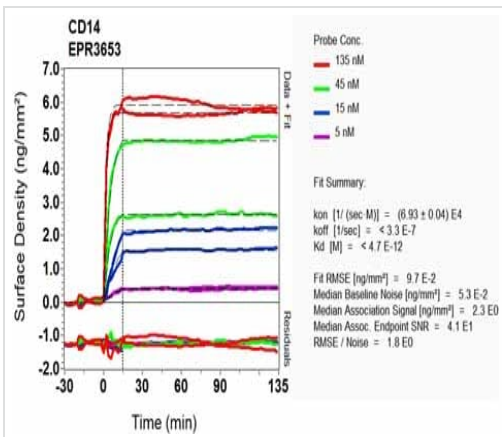


Immunohistochemical analysis of Formalin-fixed, paraffin-embedded Human placenta tissue labelling CD14 with **ab133335** (unpurified) at 1/500 dilution.

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.



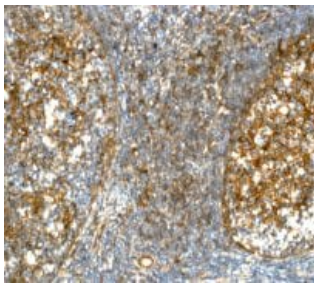
SPR Scanning - Anti-CD14 antibody [EPR3653] -
Low endotoxin, Azide free (ab214438)

Equilibrium dissociation 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	x (immune cells ✓)
		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


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.

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


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

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

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