

Product datasheet

Anti-CD163 antibody [EPR14643-36] - C-terminal ab189915

Recombinant RabMAb

★★★★★ [2 Abreviews](#) [17 References](#) [6 Images](#)

Overview

Product name	Anti-CD163 antibody [EPR14643-36] - C-terminal
Description	Rabbit monoclonal [EPR14643-36] to CD163 - C-terminal
Host species	Rabbit
Tested applications	Suitable for: IP, WB, IHC-P Unsuitable for: Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	Human placenta and Human fetal liver lysates; Human liver and tonsil tissue.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - 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 .

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR14643-36

Isotype

IgG

Applications**The Abpromise guarantee**Our **Abpromise guarantee** covers the use of ab189915 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		1/30 - 1/40.
WB		1/1000 - 1/10000.
IHC-P	★★★★★ (2)	1/500 - 1/1000. Perform heat mediated antigen retrieval using EDTA based pH 9.0 buffer.

Application notes

Is unsuitable for Flow Cyt.

Target**Function**

Acute phase-regulated receptor involved in clearance and endocytosis of hemoglobin/haptoglobin complexes by macrophages and may thereby protect tissues from free hemoglobin-mediated oxidative damage. May play a role in the uptake and recycling of iron, via endocytosis of hemoglobin/haptoglobin and subsequent breakdown of heme. Binds hemoglobin/haptoglobin complexes in a calcium-dependent and pH-dependent manner. Exhibits a higher affinity for complexes of hemoglobin and multimeric haptoglobin of HP*1F phenotype than for complexes of hemoglobin and dimeric haptoglobin of HP*1S phenotype. Induces a cascade of intracellular signals that involves tyrosine kinase-dependent calcium mobilization, inositol triphosphate production and secretion of IL6 and CSF1. Isoform 3 exhibits the higher capacity for ligand endocytosis and the more pronounced surface expression when expressed in cells. After shedding, the soluble form (sCD163) may play an anti-inflammatory role, and may be a valuable diagnostic parameter for monitoring macrophage activation in inflammatory conditions.

Tissue specificity

Expressed in monocytes and mature macrophages such as Kupffer cells in the liver, red pulp macrophages in the spleen, cortical macrophages in the thymus, resident bone marrow macrophages and meningeal macrophages of the central nervous system. Expressed also in blood. Isoform 1 is the lowest abundant in the blood. Isoform 2 is the lowest abundant in the liver and the spleen. Isoform 3 is the predominant isoform detected in the blood.

Sequence similarities

Contains 9 SRCR domains.

Domain

The SRCR domain 3 mediates calcium-sensitive interaction with hemoglobin/haptoglobin complexes.

Post-translational modifications

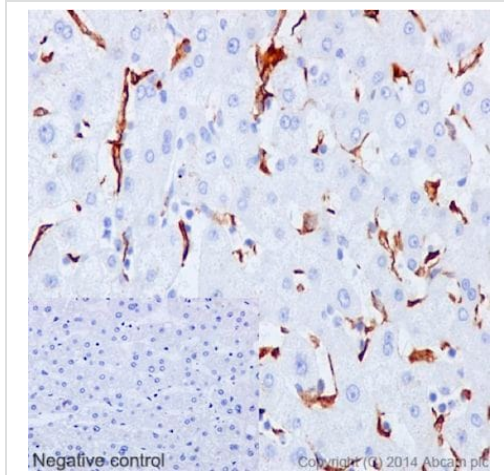
A soluble form (sCD163) is produced by proteolytic shedding which can be induced by lipopolysaccharide, phorbol ester and Fc region of immunoglobulin gamma. This cleavage is dependent on protein kinase C and tyrosine kinases and can be blocked by protease inhibitors. The shedding is inhibited by the tissue inhibitor of metalloproteinase TIMP3, and thus probably induced by membrane-bound metalloproteinases ADAMs.
Phosphorylated.

Cellular localization

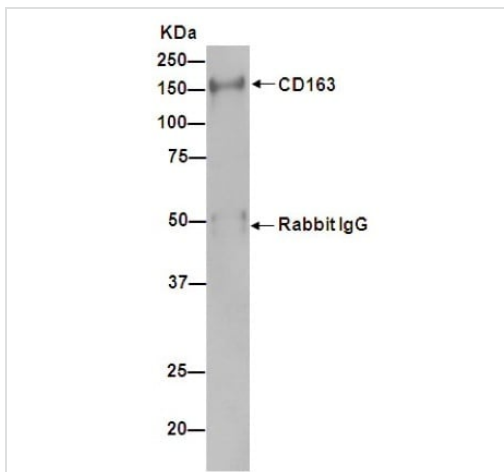
Secreted and Cell membrane. Isoform 1 and isoform 2 show a lower surface expression when

expressed in cells.

Images

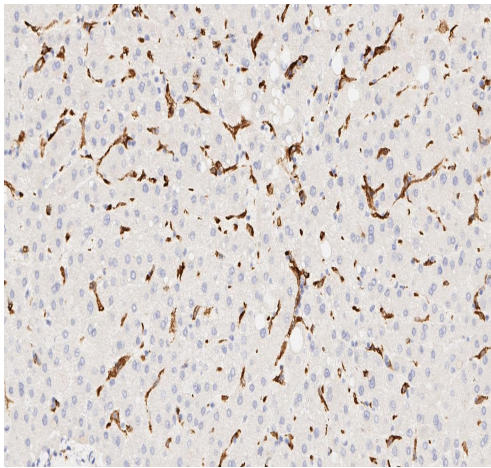


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD163 antibody
[EPR14643-36] - C-terminal (ab189915)



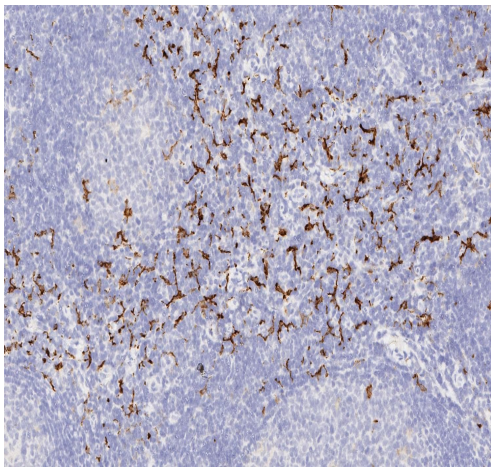
Immunoprecipitation - Anti-CD163 antibody
[EPR14643-36] - C-terminal (ab189915)

Immunoprecipitation. ab189915 at 1/1000 labeling CD163 in Human fetal kidney lysate immunoprecipitated using ab189915 at 1/50.



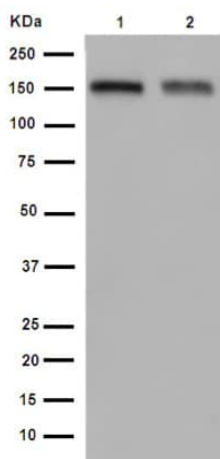
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD163 antibody [EPR14643-36] - C-terminal (ab189915)

Immunohistochemical analysis of paraffin embedded human liver tissue labeling CD163 with ab189915 at 1/100. No blocking step was performed. Anti-Rabbit HRP polymer was used as the secondary detection system. Heat-mediated antigen retrieval was performed using EDTA based pH 9.0 buffer.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD163 antibody [EPR14643-36] - C-terminal (ab189915)

Immunohistochemical analysis of paraffin embedded human tonsil tissue labeling CD163 with ab189915 at 1/100. No blocking step was performed. Anti-Rabbit HRP polymer was used as the secondary detection system. Heat-mediated antigen retrieval was performed using EDTA based pH 9.0 buffer.



Western blot - Anti-CD163 antibody [EPR14643-36]
- C-terminal (ab189915)

All lanes : Anti-CD163 antibody [EPR14643-36] - C-terminal
(ab189915) at 1/5000 dilution

Lane 1 : Human placenta lysate

Lane 2 : Human fetal liver lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form
of IgG at 1/1000 dilution

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-CD163 antibody [EPR14643-36] - C-terminal
(ab189915)

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

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