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# anti-CD163 antibody (AA 47-201)

4 Images

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**Publications** 



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#### Overview

Quantity:	100 μg
Target:	CD163
Binding Specificity:	AA 47-201
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Flow Cytometry (FACS), Immunohistochemistry (IHC), ELISA, Immunocytochemistry (ICC)

#### **Product Details**

Brand:	Picoband™
Immunogen:	E. coli-derived human CD163 recombinant protein (Position: T47-E201).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for CD163 detection. Tested with WB, IHC-P, IHC-F, ICC, FCM, Direct ELISA in Human, Mouse, Rat.

# Target Details

Target:	CD163	
Alternative Name:	CD163 (CD163 Products)	
Background:	Synonyms: Scavenger receptor cysteine-rich type 1 protein M130, Hemoglobin scavenger	
	receptor, CD163, Soluble CD163, sCD163, CD163, M130	

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.

Background: CD163 (Cluster of Differentiation 163) is a protein that in humans is encoded by the CD163 gene. The protein encoded by this gene is a member of the scavenger receptor cysteine-rich (SRCR) superfamily, and is exclusively expressed in monocytes and macrophages. It functions as an acute phase-regulated receptor involved in the clearance and endocytosis of hemoglobin/haptoglobin complexes by macrophages, and may thereby protect tissues from free hemoglobin-mediated oxidative damage. This protein may also function as an innate immune sensor for bacteria and inducer of local inflammation. Alternatively spliced transcript variants encoding different isoforms have been described for this gene.

# **Application Details**

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Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P), IHC(F) and ICC.

Application Details: Western blot, 0.1-0.5 µg/mL

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/mL

Immunohistochemistry(Frozen Section), 0.5-1 µg/mL

Immunocytochemistry, 0.5-1 µg/mL

Flow Cytometry, 1-3 µg/1x10<sup>6</sup> cells

Direct ELISA, 0.1-0.5 µg/mL

Restrictions:

For Research Use only

#### Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg NaN <sub>3</sub> .
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

## Handling

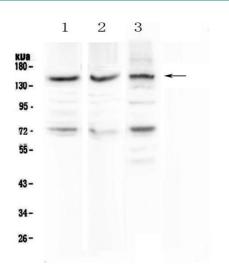
	should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month.  It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

#### **Publications**

Product cited in:

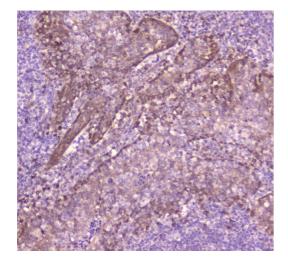
Wang, Sun, Shen, Wu, Liu, Yang, Ji, Ji, Li: "Octreotide Protects the Mouse Retina against Ischemic Reperfusion Injury through Regulation of Antioxidation and Activation of NF-κB." in: **Oxidative medicine and cellular longevity**, Vol. 2015, pp. 970156, (2016) (PubMed).

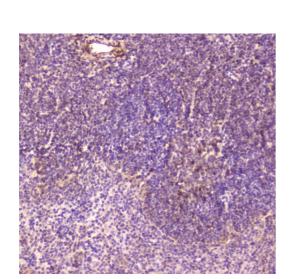
### **Images**



#### **Western Blotting**

Image 1. Western blot analysis of CD163 using anti-CD163 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human placenta tissue lysates, Lane 3: mouse NIH3T3 whole cell lysates. After Electrophoresis, transferred proteins were Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD163 antigen affinity purified polyclonal antibody (Catalog # ) at 0.5  $\mu g/mL$  overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CD163 at approximately 150KD. The expected





band size for CD163 is at 128KD.

#### **Immunohistochemistry**

**Image 2.** IHC analysis of CD163 using anti-CD163 antibody . CD163 was detected in paraffin-embedded section of human tonsil tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 $\mu$ g/ml rabbit anti-CD163 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

#### **Immunohistochemistry**

Image 3. IHC analysis of CD163 using anti-CD163 antibody. CD163 was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-CD163 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Please check the product details page for more images. Overall 4 images are available for ABIN5693082.