

# **Anti-CD163 Antibody**

**Catalog # ABO11181** 

# Specification

# **Anti-CD163 Antibody - Product Information**

Application WB, IHC-P
Primary Accession Q86VB7
Host Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Scavenger receptor cysteine-rich type 1 protein M130(CD163) detection. Tested with WB, IHC-P in Human.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

#### **Anti-CD163 Antibody - Additional Information**

**Gene ID 9332** 

#### **Other Names**

Scavenger receptor cysteine-rich type 1 protein M130, Hemoglobin scavenger receptor, CD163, Soluble CD163, sCD163, CD163, M130

## Calculated MW 125451 MW KDa

#### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, By Heat<br/>blot, 0.1-0.5  $\mu$ g/ml, Human<br/>br>

# **Subcellular Localization** Soluble CD163: Secreted.

#### **Tissue Specificity**

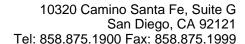
Expressed in monocytes and mature macrophages such as Kupffer cells in the liver, red pulp macrophages in the spleen, cortical macrophages in the thymus, resident bone marrow macrophages and meningeal macrophages of the central nervous system. Expressed also in blood. Isoform 1 is the lowest abundant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

#### **Protein Name**

Scavenger receptor cysteine-rich type 1 protein M130

#### Contents

Each vial contains 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. Carrier free (No BSA) form available in stock. If you want this antibody carrier free please specify Carrier Free" or "No BSA" in





your order note. "

#### **Immunogen**

E. coli-derived human CD163 recombinant protein(Position: F1056-L1165).

#### **Purification**

Immunogen affinity purified.

#### **Cross Reactivity**

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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.

**Sequence Similarities**Contains 9 SRCR domains.

## **Anti-CD163 Antibody - Protein Information**

Name CD163

Synonyms M130

#### **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.

# **Cellular Location**

[Soluble CD163]: Secreted

### **Tissue Location**

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

# **Anti-CD163 Antibody - Protocols**

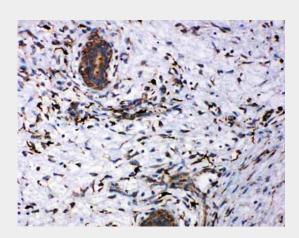
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

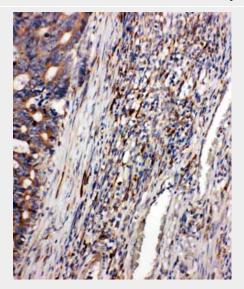


- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **Anti-CD163 Antibody - Images**

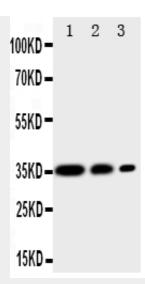


Anti-CD163 antibody, ABO11181, IHC(P)IHC(P): Human Mammary Cancer Tissue



Anti-CD163 antibody, ABO11181, IHC(P)IHC(P): Human Intestinal Cancer Tissue





Anti-CD163 antibody, ABO11181, Western blottingAll lanes: Anti CD163 (ABO11181) at 0.5ug/mlLane 1: Recombinant Human CD163 Protein 10ngLane 2: Recombinant Human CD163 Protein 5ngLane 3: Recombinant Human CD163 Protein 2.5ngPredicted bind size: 35KDObserved bind size: 35KD

# **Anti-CD163 Antibody - Background**

CD163(Cluster of Differentiation 163) also known as HEMOGLOBIN SCAVENGER RECEPTOR, is a human protein encoded by the CD163 gene. The receptor belongs to the scavenger receptor cysteine rich family type B and consists of an 1048 amino acid residues extracellular domain, a single transmembrane segment and a cytoplasmic tail with several splice variants. CD163 is a scavenger receptorfor the hemoglobin-haptoglobincomplex. Using FISH, somatic cell hybrid analysis, and radiation hybrid analysis, Stover et al.(2000) mapped the CD163 gene to chromosome 12p13.3. Specific CD163-mediated endocytosis of haptoglobin-hemoglobin complexes was measurable in cells transfected with CD163 cDNA and in CD163-expressing myelomonocytic lymphoma cells.CD163 expression in monocytes promoted bacteria-induced proinflammatory cytokine production that could be blocked by anti-CD163 antibodies. Cells expressing human CD163 and recombinant protein containing the extracellular domain of CD163 supported adhesion of erythroblastic cells.