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Anti-CD163 Antibody
Catalog # ABO11180

Specification

Anti-CD163 Antibody - Product Information

Application	**WB**
Primary Accession	Q86VB7
Host	**Rabbit**
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 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
Western blot, 0.1-0.5 µg/ml, Human

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 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human CD163(1092-1109aa HQIQYREMNSCLNADDLD).

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
- Immunohistochemistry

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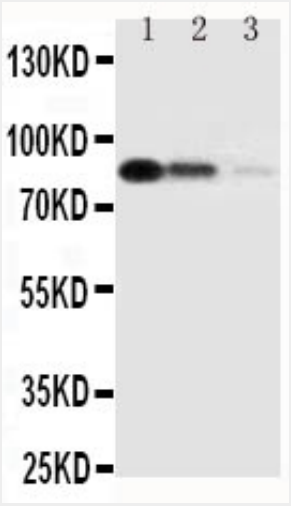
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CD163 Antibody - Images



Anti-CD163 antibody, ABO11180, Western blottingRecombinant Protein Detection Source: E.coli derived -recombinant human CD163, 35.2KD(162aa tag+E1002-L1156)Lane 1: Recombinant Human CD163 Protein 10ngLane 2: Recombinant Human CD163 Protein 5ngLane 3: Recombinant Human CD163 Protein 2.5ng

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.