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CD163 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP7330a

Specification

CD163 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q86VB7

CD163 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 9332

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7330a was selected from the N-term region of human CD163. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CD163 Antibody (N-term) Blocking Peptide - Protein Information

Name CD163

CD163 Antibody (N-term) Blocking Peptide - Background

CD163 is an 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. The protein may play a role in the uptake and recycling of iron, via endocytosis of hemoglobin/haptoglobin and subsequent breakdown of heme. It binds hemoglobin/haptoglobin complexes in a calcium-dependent and pH-dependent manner. And it 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. It also induces a cascade of intracellular signals that involves tyrosine kinase-dependent calcium mobilization, inositol triphosphate production and secretion of IL6 and CSF1.

CD163 Antibody (N-term) Blocking Peptide - References

Buehler,P.W., Abraham,B. Blood 113 (11), 2578-2586 (2009)Fabriek,B.O., van Bruggen,R. Blood 113 (4), 887-892 (2009)Strauss,M. and Levy,A.P. Mol. Cell. Biochem. 317 (1-2), 131-135 (2008)Groselj-Grenc,M., Ihan,A. Mediators Inflamm. 2008, 202646 (2008)

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

CD163 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides