

CD163 Antibody (clone 2B12)
Mouse Monoclonal Antibody
Catalog # ALS17068**Specification**

CD163 Antibody (clone 2B12) - Product Information

Application	IHC, IF, WB
Primary Accession	Q86VB7
Other Accession	9332
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Calculated MW	125451

CD163 Antibody (clone 2B12) - Additional Information**Gene ID** 9332**Other Names**

CD163, CD163 antigen, Macrophage-associated antigen, M130, CD163 molecule, Hemoglobin scavenger receptor, MM130

Target/Specificity

Human CD163

Reconstitution & Storage

PBS, pH 7.3, 1% BSA, 50% glycerol, 0.02% sodium azide. Store at -20°C. Minimize freezing and thawing.

Precautions

CD163 Antibody (clone 2B12) is for research use only and not for use in diagnostic or therapeutic procedures.

CD163 Antibody (clone 2B12) - 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

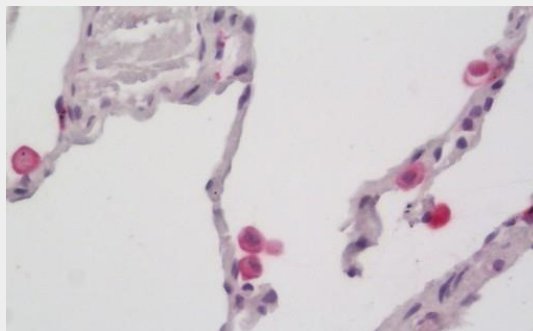
Volume

50 µl

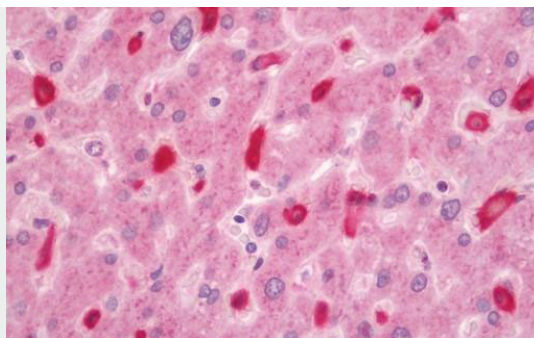
CD163 Antibody (clone 2B12) - Protocols

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

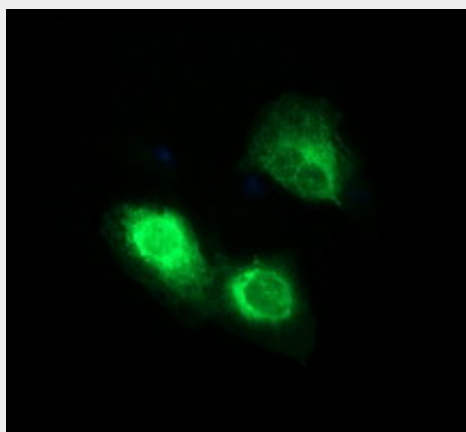
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD163 Antibody (clone 2B12) - Images

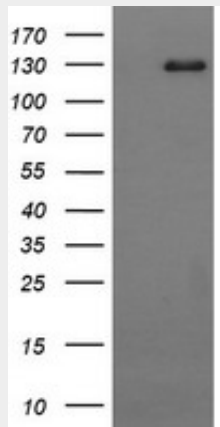
Human Lung: Formalin-Fixed, Paraffin-Embedded (FFPE)



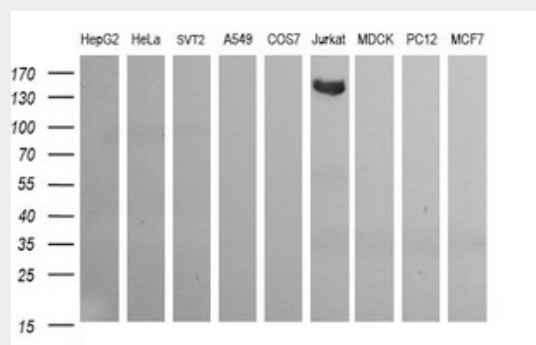
Human Liver: Formalin-Fixed, Paraffin-Embedded (FFPE)



Anti-CD163 mouse monoclonal antibody immunofluorescent staining of COS7 cells transiently...



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CD163...



Western blot of extracts (35 ug) from 9 different cell lines by using anti-CD163 monoclonal...

CD163 Antibody (clone 2B12) - Background

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.

CD163 Antibody (clone 2B12) - References

Law S.K.A.,et al.Eur. J. Immunol. 23:2320-2325(1993).
Ritter M.,et al.Biochem. Biophys. Res. Commun. 260:466-474(1999).
Welch S.-K.W.,et al.Submitted (MAY-2005) to the EMBL/GenBank/DDBJ databases.
Scherer S.E.,et al.Nature 440:346-351(2006).
Droste A.,et al.Biochem. Biophys. Res. Commun. 256:110-113(1999).