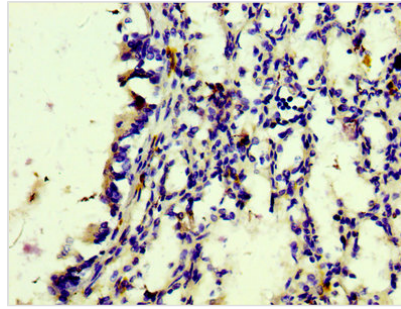


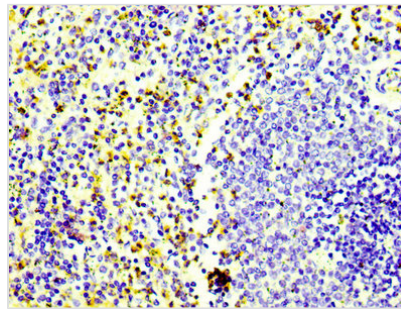


CD163 Recombinant Monoclonal Antibody

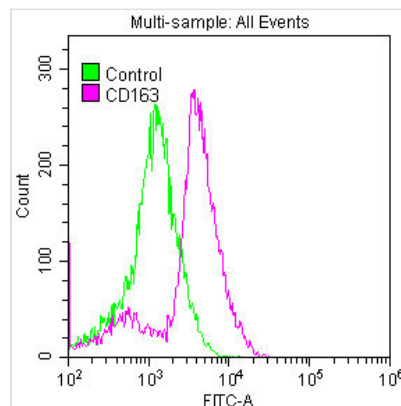
Product Code	CSB-RA801238A0HU
Abbreviation	Scavenger receptor cysteine-rich type 1 protein M130
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q86VB7
Immunogen	A synthesized peptide
Species Reactivity	Human
Tested Applications	ELISA, IHC, FC; Recommended dilution: IHC:1:50-1:500
Relevance	<p>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. After shedding, the soluble form (sCD163) may play an anti-inflammatory role, and may be a valuable diagnostic parameter for monitoring macrophage activation in inflammatory conditions.</p>
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Scavenger receptor cysteine-rich type 1 protein M130, Hemoglobin scavenger receptor, CD163, Soluble CD163, sCD163, CD163, M130
Immunogen Species	Homo sapiens (Human)
Research Area	Immunology
Gene Names	CD163
Clone No.	7B2
Image	



IHC image of CSB-RA801238A0HU diluted at 1:100 and staining in paraffin-embedded human lung tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4^o overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CSB-RA801238A0HU diluted at 1:100 and staining in paraffin-embedded human spleen tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4^o overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Overlay histogram showing Raw264.7 cells stained with CSB-RA801238A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then permeabilized with 0.3% Triton X-100 for 2 min. The cells were then incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4^o. The secondary antibody used was FITC goat anti-rabbit IgG (H+L) at 1/200 dilution for 1 h at 4^o. Control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.

Description

CD163 antibody CSB-RA801238A0HU is a recombinant monoclonal antibody produced from the expression of the plasmids that were constructed by the CD163 monoclonal antibody (generated from animals with the human CD163 synthesized peptide immunization) DNA sequence in cell lines. The CD163 antibody was purified through affinity- chromatography method. It is a rabbit IgG antibody. It can detect the human CD163 protein in ELISA, IHC, and FC analyses.

CD163 is a hemoglobin (Hb) scavenger receptor with anti-inflammatory and immunoregulatory functions and is only found on monocytes and macrophages. It also plays a role in endothelial cell adhesion, tolerance induction, and tissue regeneration, among other processes. sCD163 is a soluble form of CD163 that is a hallmark of active M2 macrophages as well as a novel marker linked to low-grade inflammatory diseases like diabetes, obesity, liver disease, and atherosclerosis.