USA Tel: 1-877-374-4368 • Int. Tel: 1-718-484-3990
sales@epigentek.com • www.epigentek.com

CD163 Monoclonal Antibody [RMC238A]

(Catalog #A68443)

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. 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.

Description
CD163 Monoclonal Antibody, clone RMC238A. Unconjugated. Raised in: Rabbit.

Formulation
Liquid. Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Specificity
Human

Isotype
IgG

Uniprot ID
Q86VB7

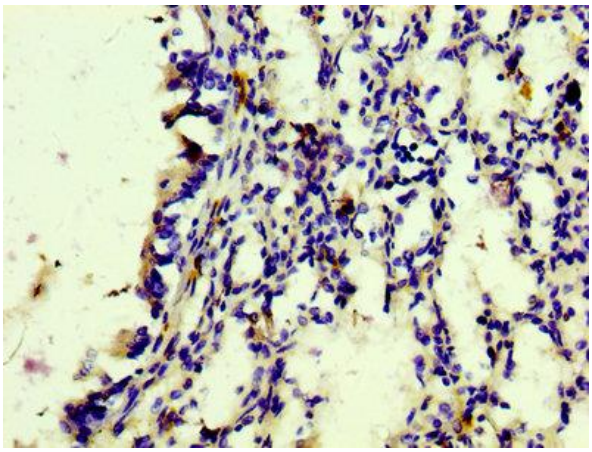
Purification
Affinity Purified

Immunogen
A synthesized peptide

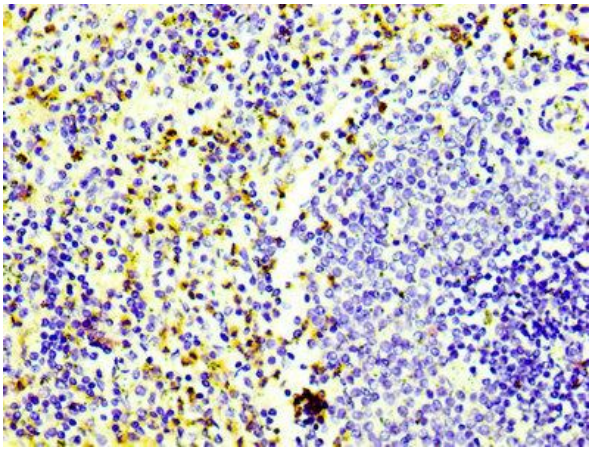
Storage
Shipped at 4°C. Upon receipt, store at -20°C (short-term) or -80°C (long-term). Avoid repeated freeze.

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

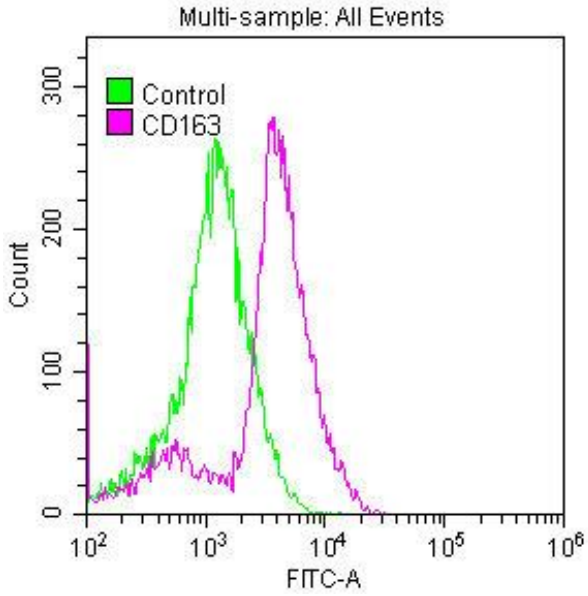
Application
ELISA, IHC, FC; Recommended dilution: IHC: 1:100-1:200



IHC image of CD163 Monoclonal Antibody [RMC238A] diluted at 1:100 and staining in paraffin-embedded human lung tissue performed on a Leica Bond™ 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°Covernight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CD163 Monoclonal Antibody [RMC238A] diluted at 1:100 and staining in paraffin-embedded human spleen tissue performed on a Leica Bond™ 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°Covernight. 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 CD163 Monoclonal Antibody [RMC238A] (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℃.The secondary antibody used was FITC goat anti-rabbit IgG (H+L) at 1/200 dilution for 1 h at 4℃. Control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.