

#### KD-Validated Anti-CD163 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI2326

## **Specification**

# **KD-Validated Anti-CD163 Rabbit Monoclonal Antibody - Product Information**

Application Primary Accession Reactivity Clonality Isotype Calculated MW

Gene Name Aliases WB, ICC <u>Q86VB7</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 125 kDa; Observed, 125 kDa KDa CD163 CD163; CD163 Molecule; M130; SCARI1; MM130; Scavenger Receptor Cysteine-Rich Type 1 Protein M130; Hemoglobin Scavenger Receptor; CD163 Antigen; Macrophage-Associated Antigen A synthesized peptide derived from human CD163

Immunogen

## KD-Validated Anti-CD163 Rabbit Monoclonal 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

## KD-Validated Anti-CD163 Rabbit Monoclonal 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

## **KD-Validated Anti-CD163 Rabbit Monoclonal Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## KD-Validated Anti-CD163 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-CD163 antibody (Cat#AGI2326). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-CD163 antibody (Cat#AGI2326, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-CD163 antibody (Cat#AGI2326). CD163 expression in wild type (WT) and CD163 shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-CD163 antibody (Cat#AGI2326, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Immunocytochemical staining of Hela cells with CD163 antibody (Cat#AGI2326, 1:1,000). Nuclei were stained blue with DAPI; CD163 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20  $\mu$ m.