SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Primary Antibody]

Rabbit Anti-CD163 antibody

Catalog Number: SL23128R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	CD163
Immunogen:	KLH conjugated synthetic peptide derived from human CD163: 101-200/1156 <Extracellular>
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human(predicted:Rat,Mouse)
Predicted MW.:	121kDa
Subcellular Location:	The cell membrane Secretory protein
Background:	The protein encoded by this gene is a member of the scavenger receptor cysteine-rich (SRCR) superfamily, and is exclusively expressed in monocytes and macrophages. It functions as an acute phase-regulated receptor involved in the clearance and endocytosis of hemoglobin/haptoglobin complexes by macrophages, and may thereby protect tissues from free hemoglobin-mediated oxidative damage. This protein may also function as an innate immune sensor for bacteria and inducer of local inflammation. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Aug 2011] **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

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

	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. **Subcellular Location:** Secreted and Cell membrane. Isoform 1 and isoform 2 show a lower surface expression when expressed in cells. **Tissue Specificity:** 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. **Post-translational modifications:** A soluble form (sCD163) is produced by proteolytic shedding which can be induced by lipopolysaccharide, phorbol ester and Fc region of immunoglobulin gamma. This cleavage is dependent on protein kinase C and tyrosine kinases and can be blocked by protease inhibitors. The shedding is inhibited by the tissue inhibitor of metalloproteinase TIMP3, and thus probably induced by membrane-bound metalloproteinases ADAMs. Phosphorylated. **Similarity:** Contains 9 SRCR domains. **Database links:** **Entrez Gene:** 9332 Human **Entrez Gene:** 93671 Mouse **Entrez Gene:** 312701 Rat Omim: 605545 Human **SwissProt:** Q86VB7 Human **SwissProt:** Q2VLH6 Mouse **Unigene:** 504641 Human **Unigene:** 37426 Mouse **Unigene:** 203204 Rat CD163 is a member of the SRCR superfamily, also known as hemoglobin scavenger receptor (HbSR), M130, or p155. The expression level of CD163 is regulated by many factors; glucocorticoids and anti-inflammatory mediators such as IL-10 and IL-6 can upregulate CD163, whereas pro-inflammatory

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

	mediators such as lipopolysaccharide (LPS), γ-Interferon (interferon-γ, IFN-γ), and TNF-α inhibit CD163 expression. CD163 is a type I membrane protein, also known as M130 antigen, Ber-Mac3, Ki-M8, or SM4. CD163 is restrictedly expressed in the monocyte/macrophage lineage; all circulating monocytes and macrophages in most tissues (except the mantle zone and germinal center of lymphoid follicles) are positive, and it is mainly used for the detection of monocytes/macrophages.

[VALIDATION IMAGES]

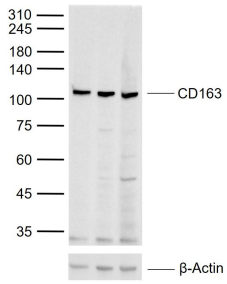


Figure 1. Sample: Lane 1: Human A375 cell lysates Lane 2: Human HeLa cell lysates Lane 3: Human HL-60 cell lysates Primary: Anti-CD163 (SL23128R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 121 kDa Observed band size: 105 kDa

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.