ARG54249
anti-CD163 antibody [GHI/61] (PE)

Package: 50 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [GHI/61] recognizes CD163
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The clone GHI/61 recognizes CD163, an approximately 130 kDa high affinity scavenger receptor expressed mainly on monocytes and macrophages, which binds hemoglobin-haptoglobin complex. HLDA VI; WS Code M38
Host	Mouse
Clonality	Monoclonal
Clone	GHI/61
Isotype	IgG1
Target Name	CD163
Immunogen	Hairy cell leukemia cells
Conjugation	PE
Alternate Names	sCD163; M130; Scavenger receptor cysteine-rich type 1 protein M130; MM130; CD antigen CD163; Hemoglobin scavenger receptor

Application Instructions

Application table

Application	Dilution
FACS	10 µl / 10^6 cells

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

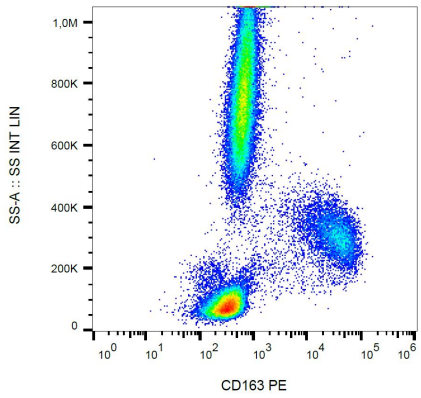
Properties

Form	Liquid
Purification Note	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free BSA
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 9332 Human Swiss-port # Q86VB7 Human
Gene Symbol	CD163
Gene Full Name	CD163 molecule
Background	CD163 protein 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	CD163: 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. [UniProt]
Highlight	Related products: CD163 antibodies; CD163 ELISA Kits; CD163 Duos / Panels; Anti-Mouse IgG secondary antibodies; Related news: New antibody panels and duos for Tumor immune microenvironment Anti-SerpinB9 therapy, a new strategy for cancer therapy RIP1 activation and pathogenesis of NASH
Research Area	M1/M2/TAM Marker antibody; Macrophage Marker antibody; M2 Macrophage Marker antibody
Calculated Mw	125 kDa
PTM	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.

Images



ARG54249 anti-CD163 antibody [GHI/61] (PE) FACS image

Flow Cytometry: Human peripheral blood stained with ARG54249 anti-CD163 antibody [GHI/61] (PE).