

## ARG81441 Human CD163 ELISA Kit

Package: 96 wells  
Store at: 4°C

### Component

Cat. No.	Component Name	Package	Temp
ARG81441-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81441-002	Standard	2 X 100 ng/vial	4°C
ARG81441-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81441-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81441-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81441-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81441-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81441-008	25X Wash buffer	20 ml	4°C
ARG81441-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81441-010	STOP solution	10 ml (Ready to use)	4°C
ARG81441-011	Plate sealer	4 strips	Room temperature

### Summary

Product Description	ARG81441 Human CD163 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human CD163 in serum, plasma (heparin) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	CD163
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	0.78 ng/ml
Sample Type	Serum, plasma (heparin) and cell culture supernatants.
Standard Range	1.56 - 100 ng/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 5.2% Inter-Assay CV: 6.1%
Alternate Names	sCD163; M130; Scavenger receptor cysteine-rich type 1 protein M130; MM130; CD antigen CD163; Hemoglobin scavenger receptor

## Application Instructions

Assay Time	~ 5 hours
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## Properties

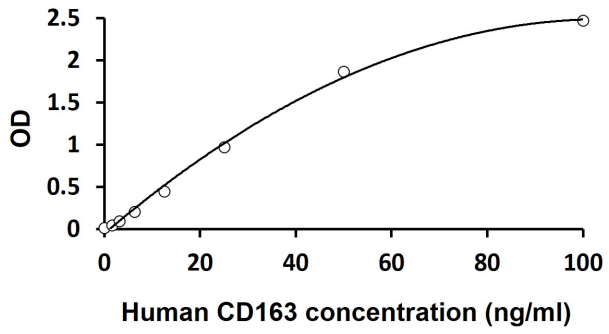
Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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	<p>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.</p> <p>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]</p>
Highlight	<p>Related products:  <a href="#">CD163 antibodies</a>; <a href="#">CD163 ELISA Kits</a>; <a href="#">CD163 Duos / Panels</a>;</p> <p>Related news:  <a href="#">New antibody panels and duos for Tumor immune microenvironment</a>  <a href="#">Anti-SerpinB9 therapy, a new strategy for cancer therapy</a>  <a href="#">RIP1 activation and pathogenesis of NASH</a></p> <p>New ELISA data calculation tool:  <a href="#">Simplify the ELISA analysis by GainData</a></p>
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.

## Images

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ARG81441 Human CD163 ELISA Kit standard curve image

ARG81441 Human CD163 ELISA Kit results of a typical standard run with optical density reading at 450 nm.