

## CD163 Porcine

**Description:** CD163 Porcine Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 805 amino acids and having a molecular mass of 87kDa. The CD163 is fused to an 8 amino acid His Tag at C-terminus and purified by proprietary chromatographic techniques.

**Synonyms:** CD-163, Hemoglobin scavenger receptor, macrophage-associated antigen, M130, sCD163, CD163, MM130.

**Source:** Escherichia Coli.

**Physical Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**Amino Acid Sequence:** MDKLRMVLHE NSGSADLKL R VVDGVTECSG RLEVKFQGEW  
GTICDDGWDS DDAVACKQL GCPTAVTAIG RVNASEGTGH IWLDVSCHG HESALWQCRH  
HEWGKHYCNH NEDAGVTCSD GSDLELRLKG GGSHCAGTVE VEIQLVGKV CDRSWGLKEA  
DVVCRQLGCG SALKTSYQVY SKTKATNTWL FVSSCNGNET SLWDCKNWQW GGLSCDHYDE  
AKITCSAHRK PR

**Purity:** Greater than 95.0% as determined by: (a) Analysis by HPLC. (b) Analysis by SDS-PAGE.

### Formulation:

The protein was lyophilized from a 0.2

### Stability:

Lyophilized CD163 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CD163 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

### Usage:

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

### Solubility:

It is recommended to reconstitute the lyophilized CD163 in sterile 18M-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### Introduction:

CD163 is an acute phase-regulated receptor which participates in the removal and endocytosis of hemoglobin/haptoglobin complexes by macrophages and thus keeps tissues from free hemoglobin-mediated oxidative damage. Furthermore, CD163 partakes in the uptake and recycling of iron, through endocytosis of hemoglobin/haptoglobin and ensuing breakdown of heme. In addition, CD163 binds hemoglobin/haptoglobin complexes in a calcium-dependent and pH-dependent way. CD163 demonstrates greater affinity for complexes of hemoglobin and multimeric haptoglobin of HP-1F phenotype than for complexes of hemoglobin and dimeric haptoglobin of HP-1S phenotype. Moreover, CD163 stimulates a cascade of intracellular signals which involves tyrosine kinase-dependent calcium recruitment, inositol triphosphate formation and secretion of IL-6 & CSF-1.

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