

Recombinant Porcine CD163

Cat. No. CD163-94P **Lot. No.** (See product label)

SPECIFICATION

Product Overview	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.
Species	Pig
Source	E.coli
ProteinLength	805 a.a.
Description	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.
Form	Sterile Filtered White lyophilized (freeze-dried) powder. The protein was lyophilized

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

from a 0.2m filtered concentrated solution in 1×PBS, pH 7.4, containing 4M Urea.

Molecular Mass 87kDa

AA Sequence

MDKLRMVLHE NSGSADLKL R VVDGVTECSG RLEV KFQGEW GTICDDGWDS
 DDAAVACKQL GCPTAVTAIG RVNASEGTGH IWLDSVSCHG HESALWQCRH
 HEWGKHYCNH NEDAGVTCSD GSDLELRLKG GGS HCAGTVE VEIQKL VGKV
 CDRSWGLKEA DVVCRQLGCG SALKTSYQVY SKTKATNTWL FVSSCNGNET
 SLWDCKNWQW GGLSCDHYDE AKITCSAHRK PRLVGGDIPC SGRVEVQHGD
 TWGTVCDSD F SLEAASVLCR ELQCGTVVSL LGGAHFGEGS GQIWAE EFQC
 EG HESHL SLC PVAPRPDGTC SHSRDVG VVC SRYTQIRLVN GKTPCEGRVE
 LNILGSWGS L CNSHWD MEDA HVLCQQLKCG VALSIPGGAP FGKGSEQVWR
 HMFHCTGTEK HMGDCSVTAL GASLCSSGQV ASVICSGNQ S QTLSPCNSSS
 SDPSSSIISE ENGVACIGSG QLRLVDGGGR CAGRVEVYHE GSWG TICDD S
 WDLNDAHVV C KQLSCGWAIN ATGSAHFGEG TGPIWLDEIN CNGKESHIWQ
 CHSHGWGRHN CRHKEDAGVI CSEFMSLR LI SENSRETCAG RLEV FYNGAW
 GSVGKNSMSP ATVG VVCRQL GCADRGDISP ASSDKTVSRH MWVDNVQCPK
 GPDTLWQCPS SPWKKRLASP SEETWITCAN KIRLQEGNTN CSGRVEI WYG
 GSWGTVCD DS WDLEDAQVVC RQLGCGSALE AGKEA AFGQG TGPIWLNEVK
 CKGNETSLWD CPARSWG HSD CGHKEDAAVT CSEIAKSRES LHATGRSHHH
 HHHHH.

Purity Greater than 95.0% as determined by HPLC and SDS-PAGE.

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.

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Reconstitution

It is recommended to reconstitute the lyophilized CD163 in sterile 18MΩ-cm H₂O not less than 100g/ml, which can then be further diluted to other aqueous solutions.

GENE INFORMATION

Gene Name CD163 CD163 molecule [*Sus scrofa* (pig)]

Official Symbol CD163

Synonyms

CD163; CD163 molecule; scavenger receptor cysteine-rich type 1 protein M130; CD-163; M130; sCD163; MM130; Hemoglobin scavenger receptor; macrophage-associated antigen

Gene ID 397031

mRNA Refseq NM_213976

Protein Refseq NP_999141

UniProt ID Q2VL90

Chromosome Location Un

Function scavenger receptor activity; virus receptor activity

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