

[Go to Product page](#)

Datasheet for ABIN3116173

**CD163 Protein (CD163) (AA 42-1156) (rho-1D4 tag)**

## Overview

Quantity:	1 mg
Target:	CD163
Protein Characteristics:	AA 42-1156
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CD163 protein is labelled with rho-1D4 tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

## Product Details

Sequence:	SSLGGTDKEL RLVDGENKCS GRVEVKVQEE WGTVCNNGWS MEAVSVICNQ LGCPTAIKAP GWANSSAGSG RIWMDHVSCR GNESALWDCK HDGWGKHSNC THQQDAGVTC SDGSNLEMRL TRGGNMCSGR IEIKFQGRWG TVCDDNFNID HASVICRQLE CGSAVSFSGS SNFGEESGPI WFDDLICNGN ESALWNCKHQ GWGKHNCDDHA EDAGVICSKG ADLSLRLVDG VTECSGRLEV RFQGEWGTIC DDGWDSYDAA VACKQLGCPT AVTAIGRVNA SKGFGHIWLD SVSCQGHEPA IWQCKHHEWG KHYCNHNEDA GVTCSGSDSL ELRLRGGGSR CAGTVEVEIQ RLLGKVCDRG WGLKEADVVC RQLGCGSALK TSYQVYSKIQ ATNTWLFLSS CNGNETSLWD CKNWQWGGLT CDHYEEAKIT CSAHREPLRV GGDIPCSGRV EVKHGDTWGS ICDSDFSLEA ASVLCRELQC GTVVSILGGA HFGEGNGQIW AEEFQCEGHE SHLSLCPVAP RPEGTCSHSR DVGVVCSRYT EIRLVNGKTP CEGRVELKTL GAWGSLCNSH WDIEDAHVLC QQLKCGVALS TPGGARFGKG NGQIWRHMFH CTGTEQHMGD CPVTALGASL CPSEQVASVI CSGNQSQTLS SCNSSSLGPT RPTIPEESAV ACIESGQLRL VNGGGRCAGR VEIYHEGSWG TICDDSWDLS DAHVVCRLG
-----------	--

CGEAINATGS AHFGEGTGPI WLDEMKCNGK ESRIWQCHSH GWGQQNCRHK EDAGVICSEF  
MSLRLTSEAS REACAGRLEV FYNGAWGTVG KSSMSETTVG VVCRQLGCAD KGKINPASLD  
KAMSIPMWVD NVQCPKGPDT LWQCPSSPWE KRLASPSEET WITCDNKIRL QEGPTSCSGR  
VEIWHGGSWG TVCDDSWDLD DAQVVCQQLG CGPALKAFKE AEFQGQTGPI WLNEVKCKGN  
ESSLWDCPAR RWGHSECGHK EDAAVNCTDI SVQKTPQKAT TGRSSRQSSF IAVGILGVVL  
LAIFVALFFL TKKRRQRQL AVSSRGENLV HQIQYREMNS CLNADDLDLM NSSENSHESA  
DFSAAELISV SKFLPISGME KEILSHTEK ENGNL

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

---

### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human CD163 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protparam tool to determine the absorption coefficient of each protein.

---

### Purification:

Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:

1. Membrane proteins are fractionated by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.
2. The best performing detergent is used for solubilization and the proteins are purified via their

## Product Details

rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot.

3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin-free.

Grade: Crystallography grade

## Target Details

Target: CD163

Alternative Name: CD163 ([CD163 Products](#))

Background: 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.

Molecular Weight: 122.0 kDa Including tag.

UniProt: [Q86VB7](#)

## Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee

Application Details

	though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)