# antibodies .- online.com





## Cadherin 5 Protein (CDH5) (AA 48-599) (MBP tag)





#### Overview

Quantity:	1 mg
Target:	Cadherin 5 (CDH5)
Protein Characteristics:	AA 48-599
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Cadherin 5 protein is labelled with MBP tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

#### **Product Details**

Sequence:

DWIWNQMHID EEKNTSLPHH VGKIKSSVSR KNAKYLLKGE YVGKVFRVDA ETGDVFAIER LDRENISEYH LTAVIVDKDT GENLETPSSF TIKVHDVNDN WPVFTHRLFN ASVPESSAVG TSVISVTAVD ADDPTVGDHA SVMYQILKGK EYFAIDNSGR IITITKSLDR EKQARYEIVV EARDAQGLRG DSGTATVLVT LQDINDNFPF FTQTKYTFVV PEDTRVGTSV GSLFVEDPDE PQNRMTKYSI LRGDYQDAFT IETNPAHNEG IIKPMKPLDY EYIQQYSFIV EATDPTIDLR YMSPPAGNRA QVIINITDVD EPPIFQQPFY HFQLKENQKK PLIGTVLAMD PDAARHSIGY SIRRTSDKGQ FFRVTKKGDI YNEKELDREV YPWYNLTVEA KELDSTGTPT GKESIVQVHI EVLDENDNAP EFAKPYQPKV CENAVHGQLV LQISAIDKDI TPRNVKFKFI LNTENNFTLT DNHDNTANIT VKYGQFDREH TKVHFLPVVI SDNGMPSRTG TSTLTVAVCK CNEQGEFTFC EDMAAQVGVS IQ

Sequence without tag.

#### **Product Details**

#### Characteristics:

- Made in Germany from design to production by highly experienced protein experts.
- Human CDH5 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 receival 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:

The protein is purified from the cleared cell lysate using MBP capture materials. Eluate fractions are analyzed by SDS-PAGE. Protein containing fractions are subjected to a second purification step through size exclusion chromatography. 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: Cadherin 5 (CDH5)

Alternative Name: CDH5 (CDH5 Products)

## **Target Details**

•	
Background:	Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells, cadherins may thus contribute to the sorting of heterogeneous cell types. This cadherin may play a important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions. It associates with alpha-catenin forming a link to the cytoskeleton. Acts in concert with KRIT1 to establish and maintain correct endothelial cell polarity and vascular lumen. These effects are
	mediated by recruitment and activation of the Par polarity complex and RAP1B. Required for
	activation of PRKCZ and for the localization of phosphorylated PRKCZ, PARD3, TIAM1 and
	RAP1B to the cell junction. {ECO:0000269 PubMed:20332120,
	ECO:0000269 PubMed:21269602}.
Molecular Weight:	63.2 kDa Including tag.
UniProt:	P33151
Pathways:	Cell-Cell Junction Organization, Signaling Events mediated by VEGFR1 and VEGFR2
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 gurantee
	though.
Comment:	N-terminal MBP-Tag
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	in solution (20 mM Hepes, pH 7.4, 5 mM NaCl)
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)



**Image 1.** "Crystallography Grade" protein due to multi-step, protein-specific purification process

## 135— 198— 100— 75— 63— 48— 35— 26— 20— Cadherin 5 (CDH 5) (AA 48 - 599), Fraction 5 - 7

#### **Western Blotting**

Image 2.

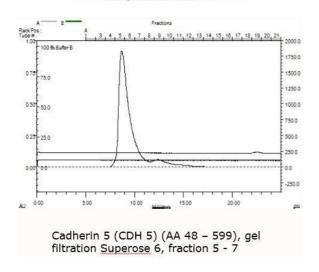


Image 3.