

Datasheet for ABIN3113424

Cadherin 5 Protein (CDH5) (AA 48-784) (rho-1D4 tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	Cadherin 5 (CDH5)
Protein Characteristics:	AA 48-784
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Cadherin 5 protein is labelled with rho-1D4 tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	DWIWNQMHID EEKNTSLPHH VGKIKSSVSR KNAKYLLKGE YVGKVFRVDA ETGDVFAIER LDRENISEYH LTAVIVDKDT GENLETPSSF TIKVHVDVNDN WPVFTHRLFN ASVPESAVG TSVISVTAVD ADDPTVGDHA SVMYQILKKG EYFAIDNSGR IITITKSLDR EKQARYEIV EARDAQGLRG DSGTATVLVT LQDINDNFPF FTQTKYTFVV PEDTRVGTSSV GSLFVEDPDE PQNRMTKYSI LRGDYQDAFT IETNPAHNEG IIKPMKPLDY EYIQQYSFIV EATDPTIDLR YMSPPAGNRA QVIINITDVD EPIFQQPFY HFQLKENQKK PLIGTVLAMD PDAARHSIGY SIRRTSDKGQ FFRVTKKGDY YNEKELDREV YPWYNLTVEA KELDSTGTPT GKESIVQVHI EVL DENDNAP EFAKPYQPKV CENAVHGQLV LQISAIDKDI TPRNVKFKFI LNTENNFTLT DNHDNTANIT VKYGOQFDREH TKVHFLPVVI SDNGMPSRTG TSTLTAVACK CNEQGEFTFC EDMAAQVGVS IQAVVAILLC ILTITVITLL IFLRRRLRKQ ARAHGKSVPE IHEQLVTYDE EGGEMDTTS YDVSVLNSVR RGGAKPPRPA LDARPSLYAQ VQKPPRHAPG AHGGPGEMAA MIEVKKDEAD HDGDGPPYDT LHIYGYEGSE SIAESLSSLG TDSSDSVDY DFLNDWGPRF
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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 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 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 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 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

Product Details

Endotoxin Level: Protein is endotoxin-free.

Grade: Crystallography grade

Target Details

Target: Cadherin 5 (CDH5)

Alternative Name: CDH5 ([CDH5 Products](#))

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: 83.8 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: 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

Handling

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)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process