

# CDH2 Human

*Cadherin 2 Human Recombinant*  
RCP0369

## Product Overview

Name CDH2 Human

### Description

Cadherin 2 Human Recombinant

Accession (Primary) [P19022](#)

### Synonyms

Cadherin 5, VE-Cadherin, Cadherin 5 Type 2 VE-Cadherin (Vascular Epithelium), CDH5, Cadherin 5 Type 2 (Vascular Endothelium), Vascular Endothelial Cadherin, 7B4 Antigen, Endothelial-Specific Cadherin, Cd144 Antigen, CD144 Antigen, Cadherin-5, CD144, 7B4.

### Introduction

Cadherin-5 (CDH5) belongs to the atypical/type 2 subgroup of Cadherin homophilic adhesion proteins. Cadherin-5 is a calcium-dependent cell-cell adhesion molecule, which is comprised of 5 extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Cadherin-5 protein plays a role in the formation, maturation and remodeling of the vascular wall. CDH5 is generally considered to be specific for vascular endothelia in which it is either the sole or the predominant cadherin, often co-existing with N-cadherin. Moreover, the CDH5 protein regulates or is regulated by VEGF R2, type 1 and type 2 TGF-beta receptors, and other endothelial junction proteins such as JAM-C, Claudin-5, and N-Cadherin. CDH5 also connects with alpha-catenin forming a link to the cytoskeleton. CDH5 functions jointly with KRIT1 to create and maintain correct endothelial cell polarity and vascular lumen. Furthermore, Cadherin-5 is essential for activation of PRKCZ and for the localization of phosphorylated PRKCZ, PARD3, TIAM1 and RAP1B to the cell junction. The CDH5 gene is located in a gene cluster in a region on the long arm of chromosome 16 which is involved in loss of heterozygosity events in breast and prostate cancer.

### Source

Sf9, Insect cells.

### Physical Appearance

Sterile filtered colorless solution.

### Formulation

CDH5 solution (0.5mg/ml) contains Phosphate Buffered Saline (pH 7.4) & 10% glycerol.

### Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term

storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

#### Purity

Greater than 90.0% as determined by SDS-PAGE.

#### Amino acid sequence

NPAQRDTHSL LPTHRQKRD WIWNQMHIDE EKNTSLPHHV GKI KSSVSRK NAKYLLKGEY VGKVFRVDAE  
TGDVFAIERL DRENISEYHL TAVIVDKDTG ENLETPSSFT IKVHDVNDNW PVFTHRLFNA SVPESSAVGT  
SVISVTAVDA DDPTVGDHAS VMYQILKGKE YFAIDNSGRI ITITKSLDRE KQARYEIVVE ARDAQGLRGD  
SGTATVLVTL QDINDNFPFF TQTKYTFVVP EDTRVGTSVG SLFVEDPDEP QNRMTKYSIL RGDYQDAFTI  
ETNPAHNEGI IKPMKPLDYE YIQQYSFIVE ATDPTIDLRY MSPPAGNRAQ VIINITDVDE PPIFQQPFYH  
FQLKENQKKP LIGTVLAMDP DAARHSIGYS IRRSDKGQF FRVTKKGDIY NEKELDREVV PWYNLTVEAK  
ELDSTGTPTG KESIVQVHIE VLDENDNAPE FAKPYQPKVC ENAVHGQLVL QISAIDKDIT PRNVKFKFIL  
NTENNFTLTD NHDNTANITV KYGQFDREHT KVHFLPVVIS DNGMPSRTGT STLTAVVCKC NEQGEFTFCE  
DMAAQGVSI Q LEPKSCDKT HTPPCPAPE LLGGPSVFLF PPKPKDTLMI SRTPEVTCVV VDVSHEDPEV  
KFNWYVDGVE VHNAKTKPRE EQYNSTYRVV SVLTVLHQDW LNGKEYKCKV SNKALPAPIE KTISKAKGQP  
REPQVYTLPP SRDELTKNQV SLTCLVKGFY PSDIAVEWES NGQPENNYKT TPPVLDSGDS FFLYSKLTVD  
KSRWQQGNVF SCSVMHEALH NHYTQKSLSL SPGKHHHHHH .

#### Precautions

CDH2 Human is for research use only and not for use in diagnostic or therapeutic procedures.

**Target Information: ( [P19022](#) )**