

## 32-13138: CDH5 Human

### Alternative Name :

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.

### Description

Source: Sf9, Insect cells.

Sterile filtered colorless solution.

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.

Cadherin 5 Human Recombinant produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 810 amino acids (29-599 a.a.) and having a molecular mass of 91.5kDa (Migrates at 70-100kDa on SDS-PAGE under reducing conditions). CDH5 is expressed with a 239 amino acid hlgG-His-tag at C-Terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

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

**Storage condition :** 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.

**Amino Acid :** NPAQRDTHSL LPTHRRQKRD WIWNQMHIIDE EKNTSLPHHV GKI KSSVSRK NAKYLLKGEY VGKVFVRDAE TGDVFAIERL DRENISEYHL TAVIVDKDTG ENLETPSSFT IKVHDVNDNW PVFTHRLFNA SVPESSAVGT SVISVTAVDA DDPTVGDHAS VMYQILKGKE YFAIDNSGRI ITITKSLDRE KQARYEIVVE ARDAQGLRGD SGTATVLVTL QDINDNPFPP TQTKYTFVVP EDTRVGTSVG SLFVEDPDEP QNRM TKYSIL RGDYQDAFTI ETNPAHNEGI IKPMKPLDYE YIQQYSFIVE ATDPTIDLRY MSPPAGNRAQ VIINITDVDE PPIFQQPFYH FQLKENQKKP LIGTVLAMDP DAARHSIGYS IRRTSKQGF FRVTKKGDIY NEKELDREYV PWYNLTVEAK ELDSTGTPTG KESIVQVHIE VLDENDNAPE FAKPYQPKVC ENAVHGQLVL QISAIDKIDT PRNVKFKFIL NTENNFTLTD NHDNTANITV KYGQFDREHT KVHFLPVVIS DNGMPSRTGT STLTVAVCKC NEQGEFTFCE DMAAQVGVS I QLEPKSCDKT HTPPCPAPE LLGGPSVFLF PPKPKDTLMI SRTPEVTCVV VDVSHEDPEV KFNWYVDGVE VHN AKTKPRE EQYNSTYRVV SVLTVLHQDW LNGKEYCKV SNKALPAPIE KTISKAKGQP REPQVYTLPP SRDELTKNQV SLTCLVKGFY PSDIAVEWES NGQPENNYKT TPPVLDSGGS FFLYSKLTVD KSRWQQGNVF SCSVMHEALH NHYTQKSLSL SPGKHHHHHH.