

## Recombinant Human CDH2 Protein, His-tagged

Cat. No. CDH2-001H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human CDH2 Protein with His tag was expressed in E. coli.

**Species** Human

**Source** E.coli

#### Description

Cadherins are a superfamily of transmembrane glycoproteins that contain cadherin repeats of approximately 100 residues in their extracellular domain. Cadherins mediate calcium-dependent cell-cell adhesion and play critical roles in normal tissue development. The classic cadherin subfamily includes N-, P-, R-, B-, and E-cadherins, as well as about ten other members that are found in adherens junctions, a cellular structure near the apical surface of polarized epithelial cells. The cytoplasmic domain of classical cadherins interacts with  $\beta$ -catenin,  $\gamma$ -catenin (also called plakoglobin), and p120 catenin.  $\beta$ -catenin and  $\gamma$ -catenin associate with  $\alpha$ -catenin, which links the cadherin-catenin complex to the actin cytoskeleton. While  $\beta$ - and  $\gamma$ -catenin play structural roles in the junctional complex, p120 regulates cadherin adhesive activity and trafficking. Investigators consider E-cadherin an active suppressor of invasion and growth of many epithelial cancers. Research studies indicate that cancer cells have upregulated N-cadherin in addition to loss of E-cadherin. This change in cadherin expression is called the "cadherin switch." N-cadherin cooperates with the FGF receptor, leading to overexpression of MMP-9 and cellular invasion. Research studies have shown that in endothelial cells, VE-cadherin signaling, expression, and localization correlate with vascular permeability and tumor angiogenesis. Investigators have also demonstrated that expression of P-cadherin, which is normally present in

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

epithelial cells, is also altered in ovarian and other human cancers.

**Molecular Mass** ~62 kDa

**AA Sequence**

DWVIPPINLPENSRGPFQELVIRISDRDKNLSLRYSVTGPADQPPTGIFIINPISGQ  
 LSVTKPLDREQIARFHLRAHAVDINGNQVENPIDIVINVIDMNDNRPEFLHQVWNGTV  
 PEGSKPGTYVMTVTAIDADDPNALNGMLRYRIVSQAPSTPSPNMFTINNETGDIITVA  
 AGLDREKVQQYTLIIQATDMEGNPTYGLSNTATAVITVTDVNDNPPEFTAMTFYGEV  
 PENRVDIIVANLTVTDKQPHTPAWNAVYRISGGDPTGRFAIQTDPNNSNDGLVTVVK  
 PIDFETNRMFVLTVAENQVPLAKGIQHPPQSTATVSVTVIDVNENPYFAPNPKIIRQE  
 EGLHAGTMLTTFTAQDPDRYMQQNIRYTKLSDPANWLKIDPVNGQITTIIVLDRESP  
 NVKNNIYNATFLASDNGIPPMSGTGTLQIYLLDINDNAPQVLPQEAETCETPDNSINI  
 TALDYDIDPNAGPFAFDLPLSPVTIKRNWTITRLNGDFAQLNLKIKFLEAGIYEVPIIITD  
 SGNPPKSNISILRVKVCQCDSDNGDCTDVDRIVGAGLGTGA

**Purity**

Transferred into competent cells and the supernatant was purified by NI column affinity chromatography and the purity is > 85% (by SDS-PAGE).

**Notes**

For research use only, not for use in diagnostic procedure.

**Storage**

Store at 4 centigrade short term. Aliquot and store at -20 centigrade long term. Avoid freeze-thaw cycles.

**Concentration**

≥0.5 mg/mL

**Storage Buffer**

PBS, 4M Urea, pH7.4

## GENE INFORMATION

**Gene Name**

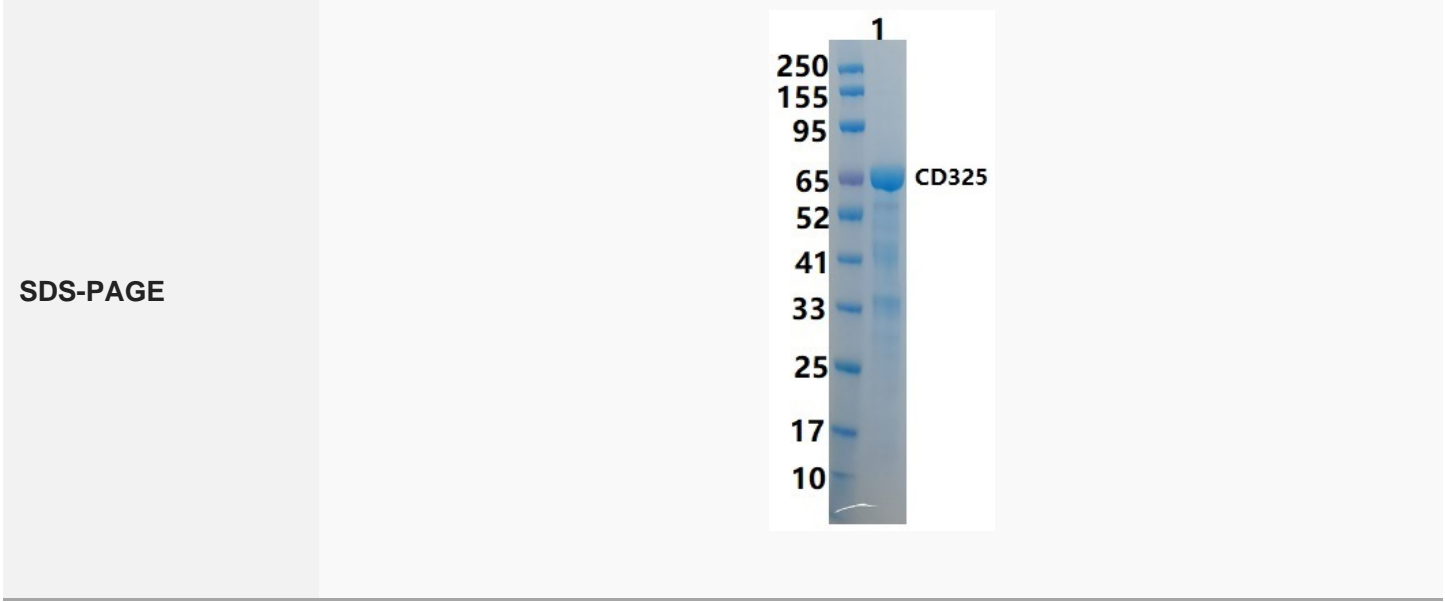
CDH2 cadherin 2, type 1, N-cadherin (neuronal) [ Homo sapiens (human) ]

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Official Symbol</b>	CDH2
<b>Synonyms</b>	CDH2; cadherin 2, type 1, N-cadherin (neuronal); NCAD; cadherin-2; CD325; CDHN; N cadherin; N-cadherin 1; neural cadherin; neural-cadherin; cadherin 2, N-cadherin (neuronal); calcium-dependent adhesion protein, neuronal; CDw325;
<b>Gene ID</b>	1000
<b>mRNA Refseq</b>	NM_001792
<b>Protein Refseq</b>	NP_001783
<b>MIM</b>	114020
<b>UniProt ID</b>	P19022



Tel: 1-631-559-9269 1-516-512-3133

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com) Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA