

VE-Cadherin Protein, Human (HEK293, C-His-Fc)

Cat. No.:	HY-P73560A
Synonyms:	Cadherin-5; VE-cadherin; CD144; CDH5
Species:	Human
Source:	HEK293
Accession:	NP_001786.2 (A26-Q593)
Gene ID:	1003
Molecular Weight:	Approximately 125 kDa

PROPERTIES

AA Sequence

```

AGANPAQRDT    H S L L P T H R R Q    K R D W I W N Q M H    I D E E K N T S L P
H H V G K I K S S V    S R K N A K Y L L K    G E Y V G K V F R V    D A E T G D V F A I
E R L D R E N I S E    Y H L T A V I V D K    D T G E N L E T P S    S F T I K V H D V N
D N W P V F T H R L    F N A S V P E S S A    V G T S V I S V T A    V D A D D P T V G D
H A S V M Y Q I L K    G K E Y F A I D N S    G R I I T I T K S L    D R E K Q A R Y E I
V V E A R D A Q G L    R G D S G T A T V L    V T L Q D I N D N F    P F F T Q T K Y T F
V V P E D T R V G T    S V G S L F V E D P    D E P Q N R M T K Y    S I L R G D Y Q D A
F T I E T N P A H N    E G I I K P M K P L    D Y E Y I Q Q Y S F    I V E A T D P T I D
L R Y M S P P A G N    R A Q V I I N I T D    V D E P P I F Q Q P    F Y H F Q L K E N Q
K K P L I G T V L A    M D P D A A R H S I    G Y S I R R T S D K    G Q F F R V T K K G
D I Y N E K E L D R    E V Y P W Y N L T V    E A K E L D S T G T    P T G K E S I V Q V
H I E V L D E N D N    A P E F A K P Y Q P    K V C E N A V H G Q    L V L Q I S A I D K
D I T P R N V K F K    F I L N T E N N F T    L T D N H D N T A N    I T V K Y G Q F D R
E H T K V H F L P V    V I S D N G M P S R    T G T S T L T V A V    C K C N E Q G E F T
F C E D M A A Q

```

Biological Activity Measured by the ability of the immobilized protein to support the adhesion of HUVEC cells. The ED₅₀ for this effect is 59.22 ng/ml, corresponding to a specific activity is 1.689×10⁴ units/mg.

Appearance Lyophilized powder.

Formulation Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Endotoxin Level <1 EU/μg, determined by LAL method.

Reconstitution It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH₂O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION**Background**

The VE-Cadherin Protein, belonging to the classical cadherin superfamily, encodes a preproprotein that undergoes proteolytic processing to yield the mature glycoprotein. This calcium-dependent cell-cell adhesion molecule comprises five extracellular cadherin repeats, a transmembrane region, and a highly conserved cytoplasmic tail. Operating as a classical cadherin, it confers upon cells the ability to adhere in a homophilic manner, thereby playing a pivotal role in the assembly and maintenance of endothelial adherens junctions. Located in a gene cluster on the long arm of chromosome 16, this gene is implicated in loss of heterozygosity events in breast and prostate cancer. Noteworthy is its biased expression, with elevated levels observed in the placenta (RPKM 108.8), lung (RPKM 57.5), and 12 other tissues, underscoring its potential significance across a spectrum of physiological contexts.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA