

VE-Cadherin Protein, Rat (HEK293, His)

Cat. No.:	HY-P73557
Synonyms:	Cadherin-5; VE-cadherin; CD144; CDH5
Species:	Rat
Source:	HEK293
Accession:	NP_001100877 (G25-Q585)
Gene ID:	307618
Molecular Weight:	Approximately 80-95 kDa

PROPERTIES

AA Sequence

G P N M L P V H Q R	Q K R D W I W N Q M	H I D E E K N E S L	P H Y V G K I K S N
V N R Q N A K Y V L	Q G E Q A G K I F R	V D A D T G D V L A	Y E R L D R E K V S
E Y F L T A L I V D	K K T N K N L E Q P	S S F T V K V H D V	N D N W P V F T H Q
V F N A S V P E M S	A I G T S V I R V T	A T D A D D P T V A	G H A T V L Y Q M V
K G N E Y F A I D N	S G L I F T K D K N	L D R E T R A E Y K	I V V E A Q D A Q G
L R G E S G T A T V	L I R L E D I N D N	F P I F T Q S T Y T	F S V P E D I R V G
K P L G S L S V E D	P D E P Q N R M T K	Y S I M Q G E Y R D	T F T I E T D P D R
N E G I I K P T K P	L D Y E L I Q Q Y T	F H I E A T D P T I	R L G Y L S S T A G
K N K A K I I I N V	L D V D E P P V F Q	R R F Y H F H L P E	N K K K P L I G T V
V A K D P D K A Q R	S I G Y S I R K T S	D R G Q Y F R I T K	Q G N I Y N E K E L
D R E T H A W Y N L	T V E A N E L D S R	G N P V G K E S I V	Q I Y I E V L D E N
D N A P E F A Q P Y	E P K V C E N A A Q	G K L V V Q I S A T	D K D V V P V N T K
F K F A L K N E D S	N F T L I N N H D N	T A N I T V K Y G Q	F N R E H T K F H Y
L P V L I S D N G M	P S L T G T G T L T	V A V C K C N E Q G	E F T F C E E 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 11.93 ng/mL. Corresponding to a specific activity is 8.382×10⁴ units/mg.

Appearance Lyophilized powder

Formulation Lyophilized from a 0.2 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**

VE-Cadherin Protein is predicted to play a crucial role in various cellular functions, including beta-catenin binding, enzyme binding, and signaling receptor binding activities. It is anticipated to be involved in processes such as cell-cell junction organization, regulation of protein modification, and regulation of protein-containing complex assembly. VE-Cadherin is predicted to function upstream of blood vessel maturation, cell-cell adhesion, and negative regulation of cell population proliferation. The protein is expected to be located in cell-cell junctions, the external side of the plasma membrane, and the nucleus, and it may participate in catenin complex formation. With predicted activity in adherens junctions and bicellular tight junctions, VE-Cadherin serves as a biomarker for pulmonary hypertension. Its human ortholog, cadherin 5 (CDH5), shows biased expression in lung and heart tissues, highlighting its importance in cardiovascular and pulmonary contexts.

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

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