Datasheet for ABIN5692987

anti-Cadherin 5 antibody (AA 46-285)

2 Images | 2 Publications

Go to Product page

Overview

Quantity:	100 µg
Target:	Cadherin 5 (CDH5)
Binding Specificity:	AA 46-285
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Cadherin 5 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Purpose:	Anti-VE-Cadherin Cdh5-Antibody Picoband®
Immunogen:	E. coli-derived mouse VE Cadherin recombinant protein (Position: D46-E285).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-VE-Cadherin Cdh5-Antibody Picoband® (ABIN5692987). Tested in ELISA, IHC, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Target Details

Target:	Cadherin 5 (CDH5)
Alternative Name:	Cdh5 (CDH5 Products)
Background:	Synonyms: Cadherin-5, Vascular endothelial cadherin, VE-cadherin, CD144, Cdh5 Tissue Specificity: Endothelial tissues and brain. Background: CDH5 (Cadherin 5), also known as VE-cadherin, is a type of cadherin. It is encoded by the human gene CDH5. This gene is mapped to 16q22.1 using somatic cell hybrid panels. Functioning as a classic cadherin by imparting to cells the ability to adhere in a homophilic manner, the protein may play an important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions. Therefore it was concluded that VE-cadherin serves the purpose of maintaining newly formed vessels.
Molecular Weight:	120 kDa
Gene ID:	12562
UniProt:	P55284
Pathways:	Cell-Cell Junction Organization, Signaling Events mediated by VEGFR1 and VEGFR2

Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL ELISA (Cap), 1-5 µg/mL 1. Huber, P., Dalmon, J., Engiles, J., Breviario, F., Gory, S., Siracusa, L. D., Buchberg, A. M., Dejana, E. Genomic structure and chromosomal mapping of the mouse VE-cadherin gene (Cdh5). Genomics 32: 21-28, 1996. 2. Kremmidiotis, G., Baker, E., Crawford, J., Eyre, H. J., Nahmias, J., Callen, D. F. Localization of human cadherin genes to chromosome regions exhibiting cancer-related loss of heterozygosity. Genomics 49: 467-471, 1998.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.

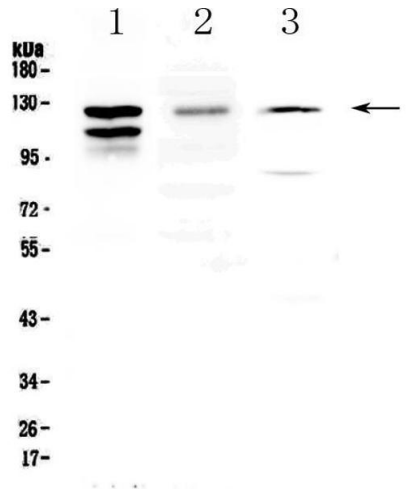
Handling

Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Publications

Product cited in:	Dai, Chen, Lin, Wang, Guo, Zhang: "Exposure to Concentrated Ambient Fine Particulate Matter Induces Vascular Endothelial Dysfunction via miR-21." in: **International journal of biological sciences**, Vol. 13, Issue 7, pp. 868-877, (2018) (PubMed). Liu, Zhu, Xiong, Zheng, Hu, Qiu: "Knockdown of protein tyrosine phosphatase receptor U inhibits growth and motility of gastric cancer cells." in: **International journal of clinical and experimental pathology**, Vol. 7, Issue 9, pp. 5750-61, (2014) (PubMed).

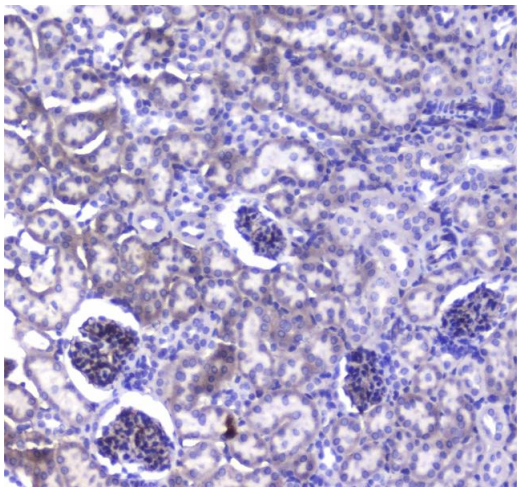
Images



Western Blotting

Image 1. Western blot analysis of VE Cadherin using anti-VE Cadherin antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse lung tissue lysates, Lane 2: mouse liver tissue lysates, Lane 3: rat PC-12 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-VE Cadherin antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is

developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for VE Cadherin at approximately 120-130KD. The expected band size for VE Cadherin is at 88KD.



Immunohistochemistry

Image 2. IHC analysis of VE Cadherin using anti-VE Cadherin antibody . VE Cadherin was detected in paraffin-embedded section of mouse kidney tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-VE Cadherin Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.