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VE-Cadherin (Phospho-Tyr731) Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52553

Specification

VE-Cadherin (Phospho-Tyr731) Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P33151
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**87528**

VE-Cadherin (Phospho-Tyr731) Antibody - Additional Information

Gene ID 1003

Other Names
Cadherin-5, 7B4 antigen, Vascular endothelial cadherin, VE-cadherin, CD144, CDH5

Dilution
WB~~1:1000
IHC~~1:50~100

Format
Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions
-20℃

VE-Cadherin (Phospho-Tyr731) Antibody - Protein Information

Name CDH5 (HGNC:1764)

Function
Cadherins are calcium-dependent cell adhesion proteins (By similarity). They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types (PubMed:21269602). This cadherin may play a important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions (By similarity). It associates with alpha-catenin forming a link to the cytoskeleton (PubMed:10861224). Plays a role in coupling actin fibers to cell junctions in endothelial cells, via acting as a cell junctional complex anchor for AMOTL2 and MAGI1 (By similarity). Acts in concert with KRIT1 and PALS1 to establish and maintain correct endothelial cell polarity and vascular lumen (By similarity). These effects are mediated by recruitment and activation of the Par polarity complex and RAP1B (PubMed:<a

href="http://www.uniprot.org/citations/20332120" target="_blank">20332120). Required for activation of PRKCZ and for the localization of phosphorylated PRKCZ, PARD3, TIAM1 and RAP1B to the cell junction (PubMed:20332120).

Cellular Location
Cell junction, adherens junction. Cell membrane; Single-pass type I membrane protein Cytoplasm {ECO:0000250|UniProtKB:P55284}. Note=Found at cell-cell boundaries and probably at cell-matrix boundaries. KRIT1 and CDH5 reciprocally regulate their localization to endothelial cell-cell junctions.

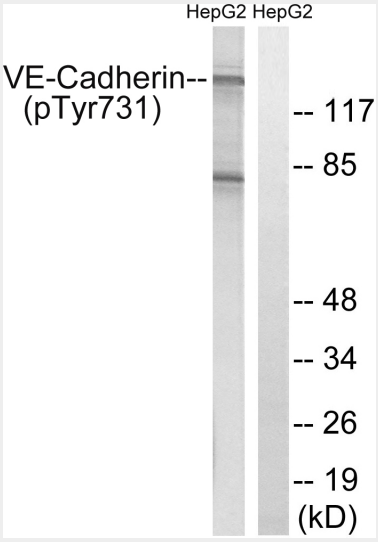
Tissue Location
Endothelial tissues and brain.

VE-Cadherin (Phospho-Tyr731) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

VE-Cadherin (Phospho-Tyr731) Antibody - Images



Western blot analysis of extracts from HepG2 cells, treated with Na3VO4 (0.3mM, 40mins), using VE-Cadherin (Phospho-Tyr731) antibody.

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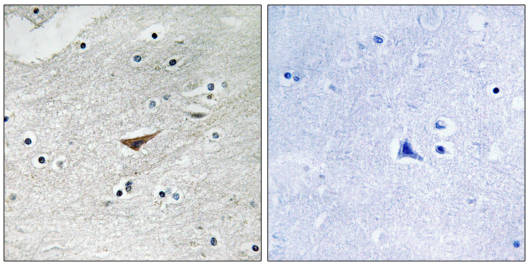

Immunohistochemistry analysis of paraffin-embedded human brain tissue using VE-Cadherin (Phospho-Tyr731) antibody.

VE-Cadherin (Phospho-Tyr731) Antibody - Background

Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. This cadherin may play a important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions. It associates with alpha-catenin forming a link to the cytoskeleton. Acts in concert with KRIT1 to establish and maintain correct endothelial cell polarity and vascular lumen. These effects are mediated by recruitment and activation of the Par polarity complex and RAP1B. Required for activation of PRKCZ and for the localization of phosphorylated PRKCZ, PARD3, TIAM1 and RAP1B to the cell junction.

VE-Cadherin (Phospho-Tyr731) Antibody - References

Breviario F.,et al.Arterioscler. Thromb. Vasc. Biol. 15:1229-1239(1995).
Ali J.,et al.Microcirculation 4:267-277(1997).
Shimoyama Y.,et al.Biochem. J. 349:159-167(2000).
Suzuki S.,et al.Cell Regul. 2:261-270(1991).
Lampugnani M.G.,et al.J. Cell Biol. 118:1511-1522(1992).

VE-Cadherin (Phospho-Tyr731) Antibody - Citations

- SARS-CoV-2 spike spurs intestinal inflammation via VEGF production in enterocytes