

# Anti-CD144 (pY731) Antibody

Rabbit polyclonal antibody to CD144 (pY731) Catalog # AP60869

### Specification

# Anti-CD144 (pY731) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IHC <u>P33151</u> <u>P55284</u> Human, Mouse, Chicken, Bovine Rabbit Polyclonal 87528

## Anti-CD144 (pY731) Antibody - Additional Information

Gene ID 1003

**Other Names** Cadherin-5; 7B4 antigen; Vascular endothelial cadherin; VE-cadherin; CD144

**Target/Specificity** Recognizes endogenous levels of CD144 (pY731) protein.

Dilution WB~~WB (1/500 - 1/1000), IH (1/50 - 1/100) IHC~~1:100~500

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

# Anti-CD144 (pY731) Antibody - Protein Information

#### Name CDH5 (<u>HGNC:1764</u>)

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:<a

href="http://www.uniprot.org/citations/21269602" target="\_blank">21269602</a>). 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:<a href="http://www.uniprot.org/citations/10861224" target="\_blank">10861224</a>). 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</a>). Required for activation of PRKCZ and for the localization of phosphorylated PRKCZ, PARD3, TIAM1 and RAP1B to the cell junction (PubMed:<a href="http://www.uniprot.org/citations/20332120" target="\_blank">20332120</a>). Associates with CTNND1/p120-catenin to control CADH5 endocytosis (By similarity).

#### **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** 

Expressed in endothelial cells (at protein level) (PubMed:27338829). Expressed in the brain (PubMed:2059658)

## Anti-CD144 (pY731) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Anti-CD144 (pY731) Antibody - Images



Western blot analysis of CD144 (pY731) expression in Hela Starved 4h (A), Hela Starved 16h (B), Hela Starved 24h (C) whole cell lysates.





Immunohistochemical analysis of CD144 (pY731) staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

## Anti-CD144 (pY731) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human CD144. The exact sequence is proprietary.