

### **CLDN18** antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22438a

## **Specification**

## **CLDN18** antibody - Product Information

Application WB,E
Primary Accession P56856
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit Ig
Calculated MW 27856

## **CLDN18** antibody - Additional Information

**Gene ID 51208** 

#### **Other Names**

Claudin-18, CLDN18

### Target/Specificity

This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between amino acids from human.

### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

# Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

CLDN18 antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **CLDN18** antibody - Protein Information

### Name CLDN18

**Function** Involved in alveolar fluid homeostasis via regulation of alveolar epithelial tight junction composition and therefore ion transport and solute permeability, potentially via downstream regulation of the actin cytoskeleton organization and beta-2-adrenergic signaling (By similarity). Required for lung alveolarization and maintenance of the paracellular alveolar epithelial barrier (By



similarity). Acts to maintain epithelial progenitor cell proliferation and organ size, via regulation of YAP1 localization away from the nucleus and thereby restriction of YAP1 target gene transcription (By similarity). Acts as a negative regulator of RANKL-induced osteoclast differentiation, potentially via relocation of TJP2/ZO-2 away from the nucleus, subsequently involved in bone resorption in response to calcium deficiency (By similarity). Mediates the osteoprotective effects of estrogen, potentially via acting downstream of estrogen signaling independently of RANKL signaling pathways (By similarity).

## **Cellular Location**

Cell junction, tight junction {ECO:0000250|UniProtKB:P56857}. Cell membrane {ECO:0000250|UniProtKB:P56857}; Multi-pass membrane protein. Note=Localizes to tight junctions in epithelial cells {ECO:0000250|UniProtKB:P56857} [Isoform A2]: Cell junction, tight junction {ECO:0000250|UniProtKB:P56857}. Lateral cell membrane {ECO:0000250|UniProtKB:P56857}

### **Tissue Location**

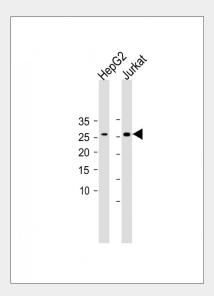
[Isoform A1]: Expression is restricted to the lung.

## **CLDN18** antibody - Protocols

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

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

### CLDN18 antibody - Images



All lanes: Anti-CLDN18 antibody at 1:1000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 28 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



## **CLDN18** antibody - Background

Involved in alveolar fluid homeostasis via regulation of alveolar epithelial tight junction composition and therefore ion transport and solute permeability, potentially via downstream regulation of the actin cytoskeleton organization and beta-2-adrenergic signaling (By similarity). Required for lung alveolarization and maintenance of the paracellular alveolar epithelial barrier (By similarity). Acts to maintain epithelial progenitor cell proliferation and organ size, via regulation of YAP1 localization away from the nucleus and thereby restriction of YAP1 target gene transcription (By similarity). Acts as a negative regulator of RANKL-induced osteoclast differentiation, potentially via relocation of TJP2/ZO-2 away from the nucleus, subsequently involved in bone resorption in response to calcium deficiency (By similarity). Mediates the osteoprotective effects of estrogen, potentially via acting downstream of estrogen signaling independently of RANKL signaling pathways (By similarity).

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Niimi T.,et al.Mol. Cell. Biol. 21:7380-7390(2001). Clark H.F.,et al.Genome Res. 13:2265-2270(2003). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Sahin U.,et al.Clin. Cancer Res. 14:7624-7634(2008). LaFemina M.J.,et al.Am. J. Respir. Cell Mol. Biol. 51:550-558(2014).