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CLDN18 antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22448a

Product Information

Application	WB, E
Primary Accession	P56856
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit Ig
Clone Names	R02977
Calculated MW	27856

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 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
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.

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.

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).

References

Niimi T.,et al.Mol. Cell. Biol. 21:7380-7390(2001).
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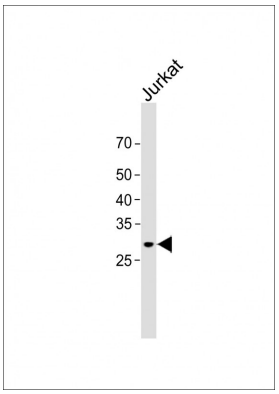
Sahin U.,et al.Clin. Cancer Res. 14:7624-7634(2008).
LaFemina M.J.,et al.Am. J. Respir. Cell Mol. Biol. 51:550-558(2014).

Images



All lanes: Anti-CLDN18 antibody at 1:1000 dilution + Jurkat whole cell lysate Lysates/proteins at 20 µg 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.