

claudin-17 (S-14): sc-69258

BACKGROUND

The claudin superfamily consists of many structurally related proteins in humans. These proteins are important structural and functional components of tight junctions in paracellular transport. Claudins are located in both epithelial and endothelial cells in all tight junction-bearing tissues. Three classes of proteins are known to localize to tight junctions, including the claudins, Occludin and Junction adhesion molecules (JAMs). Claudins, which consist of four transmembrane domains and two extracellular loops, make up tight junction strands. Emerging evidence suggests that the claudin family of proteins regulates transport through tight junctions via differential discrimination for solute size and charge. Mammalian claudin-17 and claudin-8 may be the result of a gene duplication. Claudin-17 is expressed in stratum granulosum of the epidermis and infundibulum and predominantly localizes to the plasma membrane.

REFERENCES

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3. Brandner, J.M., McIntyre, M., Kief, S., Wladykowski, E. and Moll, I. 2003. Expression and localization of tight junction-associated proteins in human hair follicles. *Arch. Dermatol. Res.* 295: 211-221.
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CHROMOSOMAL LOCATION

Genetic locus: CLDN17 (human) mapping to 21q22.11; Cldn17 (mouse) mapping to 16 C3.3.

SOURCE

Claudin-17 (S-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of claudin-17 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69258 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

claudin-17 (S-14) is recommended for detection of claudin-17 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

claudin-17 (S-14) is also recommended for detection of claudin-17 in additional species, including equine, canine and porcine.

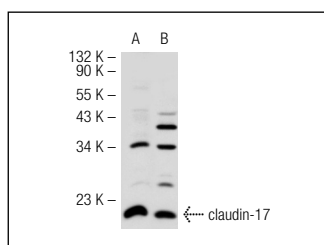
Suitable for use as control antibody for claudin-17 siRNA (h): sc-72917, claudin-17 siRNA (m): sc-72918, claudin-17 shRNA Plasmid (h): sc-72917-SH, claudin-17 shRNA Plasmid (m): sc-72918-SH, claudin-17 shRNA (h) Lentiviral Particles: sc-72917-V and claudin-17 shRNA (m) Lentiviral Particles: sc-72918-V.

Molecular Weight of claudin-17: 25 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



claudin-17 (S-14): sc-69258. Western blot analysis of claudin-17 expression in HEK293 (A) and Jurkat (B) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.