

claudin-8 (M-14): sc-33065

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. Claudins, which consist of four transmembrane domains and two extracellular loops, make up tight junction strands. Claudin expression is often highly restricted to specific regions of different tissues and may have an important role in transcellular transport through tight junctions. Claudin-8 is a multi-pass membrane protein that belongs to the claudin family. Localized to the apical and the lateral margins of principal cells, claudin-8 plays an important role in tight junction-specific obliteration of the intercellular space.

REFERENCES

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3. Go, M., Kojima, T., Takano, K., Murata, M., Ichimiya, S., Tsubota, H., Himi, T. and Sawada, N. 2004. Expression and function of tight junctions in the crypt epithelium of human palatine tonsils. *J. Histochem. Cytochem.* 52: 1627-1638.
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5. Van Itallie, C.M., Gambling, T.M., Carson, J.L. and Anderson, J.M. 2005. Palmitoylation of claudins is required for efficient tight-junction localization. *J. Cell Sci.* 118:1427-1436.

CHROMOSOMAL LOCATION

Genetic locus: Cldn8 (mouse) mapping to 16 C3.3.

SOURCE

claudin-8 (M-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of claudin-8 of mouse 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-33065 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

claudin-8 (M-14) is recommended for detection of claudin-8 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-8 (M-14) is also recommended for detection of claudin-8 in additional species, including bovine.

Suitable for use as control antibody for claudin-8 siRNA (m): sc-44866, claudin-8 shRNA Plasmid (m): sc-44866-SH and claudin-8 shRNA (m) Lentiviral Particles: sc-44866-V.

Molecular Weight of claudin-8: 25 kDa.

Positive Controls: Mouse kidney extract: sc-2255 or rat kidney extract: sc-2394.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.