# claudin-10 (F-20): sc-17678



The Power to Question

## **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 molecule (JAM). Claudins, which consist of four transmembrane domains and two extracellular loops, make up tight junction strands. Claudin expression is often highly restricted to specfic regions of different tissues and may have an important role in transcellular transport through tight junctions. claudin-15 is a 228 amino acid multi-pass membrane protein that belongs to the claudin family and plays an important role in celladhesion activity and tight junction-specific events.

## **REFERENCES**

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- 3. Heiskala, M., Peterson, P.A. and Yang, Y. 2001. The roles of claudin superfamily proteins in paracellular transport. Traffic 2: 93-98.
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- 5. Anderson, J.M. 2001. Molecular structure of tight junctions and their role in epithelial transport. News Physiol. Sci. 16: 126-130.
- 6. Rahner, C., Mitic, L.L. and Anderson, J.M. 2001. Heterogeneity in expression and subcellular localization of claudins 2, 3, 4 and 5 in the rat liver, pancreas and gut. Gastroenterology 120: 411-422.

## **CHROMOSOMAL LOCATION**

Genetic locus: CLDN10 (human) mapping to 13q32.1; Cldn10 (mouse) mapping to 14 E4.

# SOURCE

claudin-10 (F-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of claudin-10 of mouse origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-17678 P, (100  $\mu$ g 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-10 (F-20) is recommended for detection of claudin-10 of mouse, rat and human 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-10 (F-20) is also recommended for detection of claudin-10 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for claudin-10 siRNA (h): sc-43052, claudin-10 siRNA (m): sc-43053, claudin-10 shRNA Plasmid (h): sc-43052-SH, claudin-10 shRNA Plasmid (m): sc-43053-SH, claudin-10 shRNA (h) Lentiviral Particles: sc-43052-V and claudin-10 shRNA (m) Lentiviral Particles: sc-43053-V.

Molecular Weight of claudin-10 isoforms: 23/19 kDa.

## **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.



Try claudin-10 (G-12): sc-373946 or claudin-10 (H-10): sc-373700, our highly recommended monoclonal alternatives to claudin-10 (F-20).

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