

# claudin-17 (A-23): sc-133463

## 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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- Loh, Y.H., et al. 2004. Extensive expansion of the claudin gene family in the teleost fish, *Fugu rubripes*. *Genome Res.* 14: 1248-1257.
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## CHROMOSOMAL LOCATION

Genetic locus: CLDN17 (human) mapping to 21q21.3; Cldn17 (mouse) mapping to 16 C3.3.

## SOURCE

claudin-17 (A-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic claudin-17 peptide of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

claudin-17 (A-23) 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

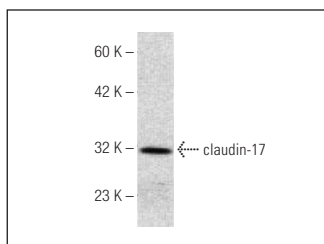
Molecular Weight of claudin-17: 25 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HEK293 whole cell lysate.

## 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



claudin-17 (A-23): sc-133463. Western blot analysis of claudin-17 expression in Jurkat whole cell lysate.

## RESEARCH USE

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