

claudin-23 (S-14): sc-87047

BACKGROUND

The claudin superfamily consists of structurally related proteins that are important structural and functional components of tight junctions. Claudin-23, also known as CLDN23 or CLDNL, is a 292 amino acid multi-pass membrane protein that localizes to cell junctions and belongs to the claudin family. Expressed in stomach and placenta, as well as in germinal center B-cells, claudin-23 is thought to exhibit calcium-dependent cell-adhesion activity through which it plays an essential role in tight junction-specific obliteration of the intercellular space. Human claudin-23 shares 80% sequence similarity with its mouse counterpart, suggesting a conserved role between species. Over-expression of claudin-23 is associated with colon tumors, implicating claudin-23 as a possible metastasis factor.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CLDN23 (human) mapping to 8p23.1.

SOURCE

claudin-23 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of claudin-23 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-87047 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

claudin-23 (S-14) is recommended for detection of claudin-23 of 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-23 (S-14) is also recommended for detection of claudin-23 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for claudin-23 siRNA (h): sc-77716, claudin-23 shRNA Plasmid (h): sc-77716-SH and claudin-23 shRNA (h) Lentiviral Particles: sc-77716-V.

Molecular Weight of claudin-23: 32 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

RESEARCH USE

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

PROTOCOLS

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