

claudin-11 (H-107): sc-25711

BACKGROUND

The claudin superfamily consists of many structurally related proteins in humans. These proteins, which include claudin-1 through -18, 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 specific regions of different tissues and may have an important role in transcellular transport through tight junctions. Claudin-11 is an oligodendrocyte-specific protein that is expressed in the tight junctions of Sertoli cells and myelin sheaths in mice. In addition, claudin-11 is expressed in the epithelial tight junctions of the choroid plexus. The human claudin-11 gene maps to chromosome 3q26.2.

CHROMOSOMAL LOCATION

Genetic locus: CLDN11 (human) mapping to 3q26.2; Cldn11 (mouse) mapping to 3 A3.

SOURCE

claudin-11 (H-107) is a rabbit polyclonal antibody raised against amino acids 101-207 mapping at the C-terminus of claudin-11 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.

APPLICATIONS

claudin-11 (H-107) is recommended for detection of claudin-11 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).

claudin-11 (H-107) is also recommended for detection of claudin-11 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for claudin-11 siRNA (h): sc-43054, claudin-11 siRNA (m): sc-43055, claudin-11 shRNA Plasmid (h): sc-43054-SH, claudin-11 shRNA Plasmid (m): sc-43055-SH, claudin-11 shRNA (h) Lentiviral Particles: sc-43054-V and claudin-11 shRNA (m) Lentiviral Particles: sc-43055-V.

Molecular Weight of claudin-11: 20 kDa.

Positive Controls: mouse brain extract: sc-2253.

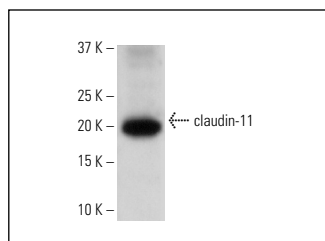
STORAGE

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

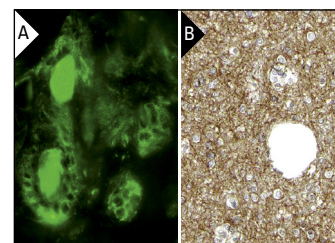
RESEARCH USE

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

DATA



claudin-11 (H-107): sc-25711. Western blot analysis of claudin-11 expression in mouse brain tissue extract.



claudin-11 (H-107): sc-25711. Immunofluorescence staining of normal mouse skin frozen section showing membrane staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing membrane staining of neuronal and non-neuronal cells magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

1. Michlig, S., et al. 2007. Claudin-based permeability barriers in taste buds. *J. Comp. Neurol.* 502: 1003-1011.
2. Mazaud-Guittot, S., et al. 2010. Claudin-11 deficiency in mice results in loss of the Sertoli cell epithelial phenotype in the testis. *Biol. Reprod.* 82: 202-213.
3. Yao, P.L., et al. 2010. Mono-(2-ethylhexyl) phthalate-induced disruption of junctional complexes in the seminiferous epithelium of the rodent testis is mediated by MMP2. *Biol. Reprod.* 82: 516-527.
4. González-Mariscal, L., et al. 2011. Identification of claudins by Western Blot and immunofluorescence in different cell lines and tissues. *Methods Mol. Biol.* 762: 213-231.

PROTOCOLS

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



Try **claudin-11 (D-8): sc-271232**, our highly recommended monoclonal alternative to claudin-11 (H-107).