claudin-11 (H-60): sc-28669



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. 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. 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-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-60) is a rabbit polyclonal antibody raised against amino acids 23-82 mapping near the N-terminus of claudin-11 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

claudin-11 (H-60) 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 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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-11 (H-60) is also recommended for detection of claudin-11 in additional species, including equine, canine, bovine, porcine and avian.

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.

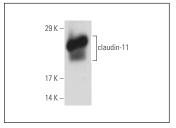
Molecular Weight of claudin-11: 20 kDa.

Positive Controls: mouse brain extract: sc-2253.

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.

DATA



claudin-11 (H-60): sc-28669. Western blot analysis of claudin-11 expression in mouse brain tissue extract.

SELECT PRODUCT CITATIONS

1. Manku, G., et al. 2016. Changes in the expression profiles of claudins during gonocyte differentiation and in seminomas. Andrology 4: 95-110.

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.



Try **claudin-11 (D-8):** sc-271232, our highly recommended monoclonal alternative to claudin-11 (H-60).

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