



Rabbit Anti-Claudin 14 antibody

SL10554R

Product Name Claudin 14**Chinese Name** 紧密连接蛋白 14 抗体**Alias** Claudin-14; CLDN14; DFNB29; Human CLDN14 gene; OTTHUMP00000109046; OTTHUMPT00000109046; OTTMUSP00000021531; UNQ777/PRO1571.**Immunogen Species** Rabbit**Clonality** Polyclonal**React Species** (predicted: Human, Mouse, Rat, Pig, Cow, Horse, Rabbit, Sheep,)**Applications** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.**Theoretical molecular weight** 26kDa**Cellular localization** The cell membrane**Form** Liquid**Concentration** 1mg/ml**immunogen** KLH conjugated synthetic peptide derived from human Claudin 14: 21-120/221 <Extracellular>**Lsotype** IgG**Purification** affinity purified by Protein A**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**PubMed** [PubMed](#)**Product Detail** The Claudin superfamily consists of many structurally related proteins in humans. These proteins are the structural and functional components of tight junctions in paracellular transport. Claudins are located in epithelial and endothelial cells in all tight junction-bearing tissues. Three classes of proteins are

localize to tight junctions, including the claudins, Occludin and Junction adhesion molecules. Claudins 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-14 is a multi-pass membrane protein that is expressed in liver, kidney and ear. Defects in the gene encoding claudin-14 are the cause of non-syndromic sensorineural deafness autosomal recessive type 29 (DFNB29), a form of hearing loss resulting from damage to the auditory pathways or neural receptors of the inner ear.

Function:

Plays a major role in tight junction-specific obliteration of the intercellular space, through calcium-dependent cell-adhesion activity. Acts as a co-receptor for HCV entry into hepatic cells.

Subunit:

Can form homo- and heteropolymers with other CLDN. Homopolymers interact with CLDN3, but not with other homopolymers. Directly interacts with TJP1/ZO-1, TJP2/ZO-2 and TJP3/ZO-3. Interacts with MICAL2 and INADL (By similarity). May interact with HCV E1 and E2 proteins.

Subcellular Location:

Cell junction, tight junction. Cell membrane; Multi-pass membrane protein.

Tissue Specificity:

Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.

DISEASE:

Defects in CLDN1 are the cause of ichthyosis-sclerosing cholangitis neonatal syndrome (NISCH) [MIM:607626]; also called ichthyosis with leukocyte vacuoles alopecia and sclerosing cholangitis. NISCH is a rare autosomal recessive complex ichthyosis syndrome characterized by scalp hypotrichosis, scarring alopecia, vulgar type ichthyosis, and sclerosing cholangitis.

Similarity:

Belongs to the claudin family.

SWISS:

O95500

Gene ID:

23562

Database links:

[Entrez Gene: 23562](#) Human

[Entrez Gene: 56173](#) Mouse



[Entrez Gene: 304073](#) Rat

[Omid: 605608](#) Human

[SwissProt: O95500](#) Human

[SwissProt: Q9Z0S3](#) Mouse

[Unigene: 660278](#) Human

[Unigene: 328716](#) Mouse