

#### Goat Anti-Claudin 14 / CLDN14 Antibody

Peptide-affinity purified goat antibody Catalog # AF1246a

# **Specification**

# Goat Anti-Claudin 14 / CLDN14 Antibody - Product Information

Application WB, IHC Primary Accession 095500

Other Accession NP 001139549, 23562, 56173 (mouse)

Reactivity Human, Mouse Predicted Rat, Pig, Dog, Cow

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG Calculated MW 25699

# Goat Anti-Claudin 14 / CLDN14 Antibody - Additional Information

#### **Gene ID 23562**

#### **Other Names**

Claudin-14, CLDN14

#### **Format**

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

Goat Anti-Claudin 14 / CLDN14 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Goat Anti-Claudin 14 / CLDN14 Antibody - Protein Information

#### Name CLDN14

### **Function**

Plays a major role in tight junction-specific obliteration of the intercellular space, through calcium-independent cell-adhesion activity.

### **Cellular Location**

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



**Tissue Location**Liver, kidney. Also found in ear.

# Goat Anti-Claudin 14 / CLDN14 Antibody - Protocols

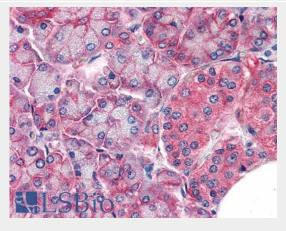
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Goat Anti-Claudin 14 / CLDN14 Antibody - Images



AF1246a (0.3  $\mu$ g/ml) staining of Human Liver lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1246a (5  $\mu$ g/ml) staining of paraffin embedded Human Pancreas. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. This data was obtained using a previous batch.



## Goat Anti-Claudin 14 / CLDN14 Antibody - Background

Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. These junctions are comprised of sets of continuous networking strands in the outwardly facing cytoplasmic leaflet, with complementary grooves in the inwardly facing extracytoplasmic leaflet. The protein encoded by this gene, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. The encoded protein also binds specifically to the WW domain of Yes-associated protein. Defects in this gene are the cause of an autosomal recessive form of nonsyndromic sensorineural deafness. It is also reported that four synonymous variants in this gene are associated with kidney stones and reduced bone mineral density. Several transcript variants encoding the same protein have been found for this gene.

# Goat Anti-Claudin 14 / CLDN14 Antibody - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

The claudins. Lal-Nag M, et al. Genome Biol, 2009. PMID 19706201.

Sequence variants in the CLDN14 gene associate with kidney stones and bone mineral density. Thorleifsson G, et al. Nat Genet, 2009 Aug. PMID 19561606.

Mutation in gap and tight junctions in patients with non-syndromic hearing loss. Belguith H, et al. Biochem Biophys Res Commun, 2009 Jul 17. PMID 19254696.

Structure and function of claudins. Krause G, et al. Biochim Biophys Acta, 2008 Mar. PMID 18036336.