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Anti-Claudin 4 Antibody

Catalog # AP51094

Product Information

Application	WB, IHC, IF/IC
Primary Accession	O14493
Reactivity	Human, Rabbit, Pig, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22077

Additional Information

Gene ID	1364
Other Names	CPER; CPETR1; WBSCR8; Claudin-4; Clostridium perfringens enterotoxin receptor; CPE-R; CPE-receptor; Williams-Beuren syndrome chromosomal region 8 protein
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Claudin 4. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

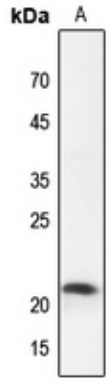
Protein Information

Name	CLDN4 {ECO:0000303|PubMed:35773259, ECO:0000312|HGNC:HGNC:2046}
Function	Can associate with other claudins to regulate tight junction structural and functional strand dynamics (PubMed:35773259, PubMed:36008380). May coassemble with CLDN8 into tight junction strands containing anion-selective channels that convey paracellular chloride permeability in renal collecting ducts (By similarity) (PubMed:36008380). May integrate into CLDN3 strands to modulate localized tight junction barrier properties (PubMed:35773259, PubMed:36008380). May disrupt strand assembly of channel-forming CLDN2 and CLDN15 and inhibit cation conductance (PubMed:35773259, PubMed:36008380). Cannot form tight junction strands on its own (PubMed:35773259, PubMed:36008380).
Cellular Location	Cell junction, tight junction. Cell membrane; Multi-pass membrane protein

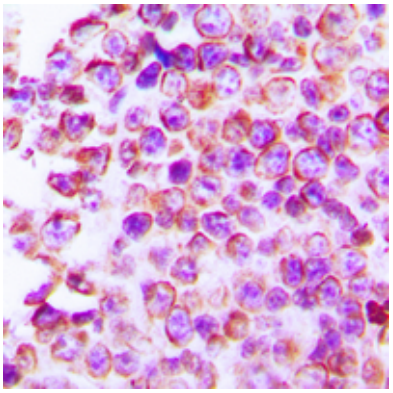
References

Katahira J.,et al.J. Biol. Chem. 272:26652-26658(1997).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Tanaka M.,et al.J. Biol. Chem. 280:42375-42382(2005).
Burkard T.R.,et al.BMC Syst. Biol. 5:17-17(2011).

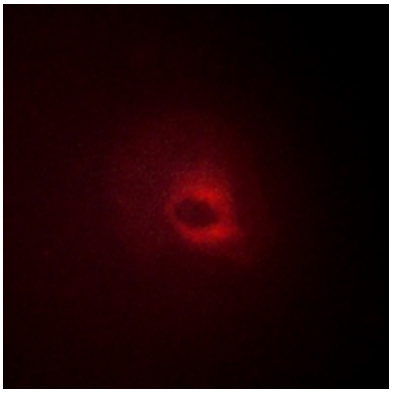
Images



Western blot analysis of Claudin 4 expression in HEK293T (A) whole cell lysates. (Predicted band size: 22 kD; Observed band size: 22 kD)



Immunohistochemical analysis of Claudin 4 staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Claudin 4 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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