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Claudin 4 Rabbit pAb

Catalog # AP97132

Product Information

Application	WB, E
Primary Accession	O14493
Other Accession	O14493
Reactivity	Rat
Predicted	Pig, Human, Mouse, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22077
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CLDN4
Epitope Specificity	21-120/209
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the claudin family.
SUBUNIT	Directly interacts with TJP1/ZO-1, TJP2/ZO-2 and TJP3/ZO-3. Interacts with EPHA2; phosphorylates CLDN4 and may regulate tight junctions.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Claudin 1-8 proteins are a family of transmembrane proteins associated with tight junctions. Tight junctions are specialized regions of cell to cell contact made up of network of strands that act as a molecular gasket for preventing the leakage of ions, water etc. between cells. They are abundant in luminal epithelial sheets where they maintain epithelial cell polarity. Different tissues exhibit different Claudin composition.

Additional Information

Gene ID	1364
Other Names	CPE-R; CPER; CPETR; CPETR1; WBSCR8; hCPE-R; Cep-r; CLD4_HUMAN; CLDN4; Clostridium perfringens enterotoxin receptor (CPE-R | CPE-receptor); Williams-Beuren syndrome chromosomal region 8 protein; CLD4_MOUSE; claudin 4; Clostridium perfringens enterotoxin receptor 1
Dilution	WB=1:500-2000,ELISA=1:2000-5000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.