

Anti-Claudin 1 Reference Antibody (Osaka U. patent anti-Claudin 1)

Catalog # APR11346

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	O95832
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG4SP-opti
Calculated MW	22744

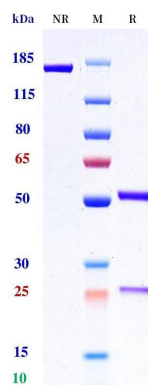
Additional Information

Target/Specificity	CLDN1 / CLD1 / SEMP1
Expression system	CHO

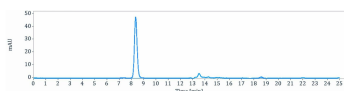
Protein Information

Name	CLDN1
Synonyms	CLD1, SEMP1
Function	Claudins function as major constituents of the tight junction complexes that regulate the permeability of epithelia. While some claudin family members play essential roles in the formation of impermeable barriers, others mediate the permeability to ions and small molecules. Often, several claudin family members are coexpressed and interact with each other, and this determines the overall permeability. CLDN1 is required to prevent the paracellular diffusion of small molecules through tight junctions in the epidermis and is required for the normal barrier function of the skin. Required for normal water homeostasis and to prevent excessive water loss through the skin, probably via an indirect effect on the expression levels of other proteins, since CLDN1 itself seems to be dispensable for water barrier formation in keratinocyte tight junctions (PubMed:23407391).
Cellular Location	Cell junction, tight junction. Cell membrane; Multi-pass membrane protein. Basolateral cell membrane Note=Associates with CD81 and the CLDN1-CD81 complex localizes to the basolateral cell membrane.
Tissue Location	Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.

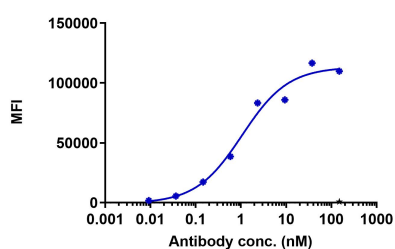
Images



Anti-Claudin 1 Reference Antibody (Osaka U. patent anti-Claudin 1) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Anti-Claudin 1 Reference Antibody (Osaka U. patent anti-Claudin 1) is 97.23%, determined by SEC-HPLC.



CAL-27 cells were stained with Osaka U. patent anti-Claudin 1 and negative control protein respectively, washed and then followed by PE and analyzed with FACS, with the EC50 is 1.0637 nM.

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