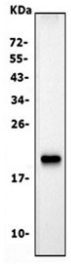
Cldn7 Antibody / Epithelial Junction Marker (RQ6167)

Catalog No.	Formulation	Size
RQ6167	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.0125% sodium azide
UniProt	Q9Z261
Applications	Western Blot : 1-2ug/ml
Limitations	This Cldn7 Antibody / Epithelial Junction Marker is available for research use only.



Cldn7 Antibody Mouse Small Intestine WB. Western blot analysis of mouse small intestine lysate using Cldn7 Antibody detects a band at approximately 20-25 kDa, consistent with the predicted molecular weight of Claudin 7 / CLDN7, supporting its role as an epithelial junction-associated protein expressed in intestinal tissue.

Description

Claudin 7 (CLDN7), also referred to as Cldn7, is a tight junction protein that plays a critical role in maintaining epithelial barrier function and regulating paracellular transport. Cldn7 antibody, also known as Claudin 7 antibody and CLDN7 antibody, detects a transmembrane protein localized to epithelial cell junctions, where it contributes to tissue organization and integrity.

As a member of the claudin family, Cldn7 participates in the formation of tight junction complexes that control permeability between adjacent epithelial cells. These junctions are essential for maintaining selective barriers in tissues such as the

gastrointestinal tract, lung, and urinary system. In addition to structural functions, Cldn7 is involved in signaling pathways that influence cell adhesion, polarity, and differentiation.

Expression of Cldn7 is predominantly observed in epithelial cells, where it exhibits characteristic membranous localization. In tumor tissues, altered expression or mislocalization of Cldn7 may occur, reflecting disruption of tight junction architecture. These changes are associated with tumor progression and altered cellular behavior, including increased invasiveness and loss of polarity.

Detection of Cldn7 expression by immunohistochemistry or immunofluorescence typically reveals membranous staining patterns in epithelial-derived cells. Cytoplasmic staining may also be present under certain conditions, reflecting protein redistribution or altered junctional dynamics in transformed tissues.

In western blot analysis, Cldn7 is detected as a band near 20-25 kDa, consistent with its predicted molecular weight. Additional bands at higher molecular weights may be observed and are commonly attributed to oligomeric forms or stable protein complexes within the membrane environment.

Functional interactions between Cldn7 and other junctional proteins contribute to the maintenance of epithelial barrier properties. Disruption of these interactions can lead to altered permeability and contribute to pathological conditions, including cancer and inflammatory disease.

For broader detection of Claudin 7 as a tight junction marker, see our Claudin 7 antibody.

Application Notes

Optimal dilution of the Cldn7 Antibody / Epithelial Junction Marker should be determined by the researcher.

Immunogen

Amino acids SESKAAYRAPRSYPKSNSSKEYV from the mouse protein were used as the immunogen for the Cldn7 antibody.

Storage

After reconstitution, the Cldn7 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Cldn7 antibody, Claudin 7 antibody, CLDN7 antibody, tight junction Cldn7 antibody, epithelial barrier protein antibody