

Rabbit Anti-Claudin 18.2 [MD415R]: RM0457, RM0457RTU7

Intended Use: For Research Use Only

Description: The claudin superfamily consists of many structurally related proteins in humans. These proteins are important structural and functional components of tight junctions in paracellular transport. Claudins are located in both epithelial and endothelial cells in all tight junction-bearing tissues. Claudin 18 (CLDN18) is a protein forming tight junctions in epithelial cells, primarily in lungs (Claudin 18.1) and in the stomach (Claudin 18.2), crucial for barrier function, with the gastric isoform (Claudin 18.2) becoming a key biomarker and target for gastric and gastroesophageal junction (GEJ) cancers. It helps maintain cell polarity and acid resistance in the stomach, but its aberrant expression in gastric/GEJ adenocarcinomas makes it a target for monoclonal antibody therapies like zolbetuximab, identifying patients eligible for treatment.

Specifications:

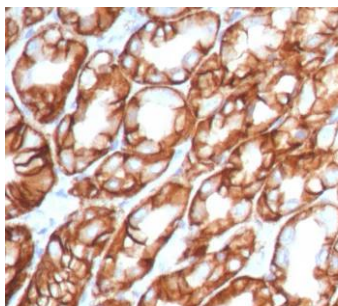
Clone: MD415R
Source: Rabbit
Isotype: IgG
Reactivity: Human, mouse
Immunogen: Recombinant fragment aa1-100 of human Claudin18.2 protein
Localization: Cell junction, tight junction, membrane
Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC, WB
Package:

Description	Catalog No.	Size
Claudin 18.2 Concentrated	RM0457	1 ml
Claudin 18.2 Prediluted	RM0457RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Gastric mucosa, pancreas
Concentrated Dilution: 50-200
Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp: 30-60 minutes @ RT
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human pancreas stained with anti-Claudin 18.2 using DAB

References:

1. Neuroendothelial NMDA receptors as therapeutic targets in experimental autoimmune encephalomyelitis. Macrez R, et al. Brain 139:2406-19, 2016.
2. Synuclein pre-formed fibrils impair tight junction protein expression without affecting cerebral endothelial cell function. Kuan WL, et al. Exp Neurol 285:72-81, 2016.
3. Novel Mechanisms of Compromised Lymphatic Endothelial Cell Homeostasis in Obesity: The Role of Leptin in Lymphatic Endothelial Cell Tube Formation and Proliferation. Sato A, et al. PLoS One 11:e0158408, 2016.

Doc. 100-RM0457
Rev. A