

Rabbit Anti-Claudin 8 [EPR12680(2)]: RM0361, RM0361RTU7

Intended Use: For Research Use Only

Description: Claudins are a large family of tight junction proteins that regulate cellular adhesion, polarity and glandular differentiation. Claudin-8 is one of the 24 member family known to exist in humans, with each having its tissue specific expression. Claudin-8 expression has been demonstrated in multiple organs, presenting a membranous and cytoplasmic staining pattern in the distal convoluted tubules and collecting ducts of the kidney, and apicolateral staining of luminal cells in the breast. Disruption of tight junctions is believed to be one of the processes that occur in carcinogenesis that allows for the loss of cellular cohesion, aggressive growth, and de-differentiation of cancer cells. Studies have shown down regulation in Claudin-8 expression in intra- and extrahepatic bile duct cancer, gallbladder carcinoma, colorectal carcinoma and invasive ductal carcinoma. A study measuring expression levels of multiple claudins revealed that claudin-low breast cancer patients had significantly worse recurrent-free survival than other patients. Additionally, Claudin-8 has been suggested as a sensitive marker for oncocytomas. In one study, the majority of oncocytomas (92%) had moderate to strong staining, which differentiated it from papillary (14%), clear cell (12%) and chromophobe (0%) renal cell carcinomas.

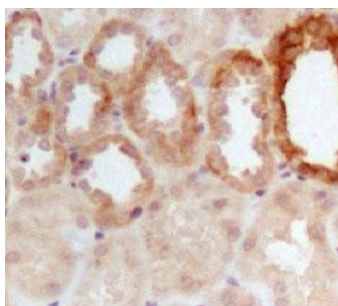
Specifications

Clone: EPR12680(2)
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human, mouse, rat
 Localization: Membrane, cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
Claudin 8 Concentrated	RM0361	1 ml
Claudin 8 Prediluted	RM0361RTU7	7 ml

IHC Procedure

Positive Control: Kidney, oncocytoma
 Concentrated Dilution: 25-100
 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 kidney stained with anti-Claudin 8 using DAB

References:

1. Immunohistochemical stain for cytokeratin 7, S100A1 and claudin 8 is valuable in differential diagnosis of chromophobe renal cell carcinoma from renal oncocytoma. Kim SS, et al. Histopathology. Apr;54(5):633-5, 2009.
2. Claudin-8 expression in renal epithelial cells augments the paracellular barrier by replacing endogenous claudin-2. Angelow S, et al. J Membr Biol. Feb;215(2-3):147-59, 2007.