For Research Use Only

Multi-rAb™ ZO-1 Multi-Recombinant antibody

Catalog Number: RMX00002



Basic Information

Catalog Number: GenBank Accession Number:

RMX00002 BC111712
Size: Genel D (NCBI):
100ul , Concentration: 1000 ug/ml by 7082

Nanodrop; UNIPROT ID:
Source: Q07157
Rabbit Full Name:

Isotype: tight junction protein 1 (zona

IgG occludens 1)

Calculated MW:

1748 aa, 195 kDa Observed MW: 230 kDa **Purification Method:**

N/A

Recommended Dilutions: WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:500-1:2000 IF/ICC 1:500-1:2000

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Species Specificity:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: Caco-2 cells, HEK-293 cells, HT-29 cells, HeLa

cells

IP: HEK-293 cells,

IHC: rat colon tissue, mouse colon tissue

IF/ICC: MCF-7 cells,

Background Information

Tight junction (or zonula occludens) forms the continuous intercellular barrier between epithelial and endothelial cells, which is required to separate tissue spaces and regulate selective movement of solutes across the epithelium and endothelium (PMID: 20066090). ZO-1 (also known as TJP1) is a peripheral membrane phosphoprotein located on the cytoplasmic face and is expressed in tight junctions of both epithelial and endothelial cells (PMID: 3528172). It binds the transmembrane proteins occludin and the claudins linking them to cytoskeletal actin (PMID: 17418867). ZO-1 belongs to a family of multidomain proteins known as the membrane-associated guanylate kinase homologs (MAGUKs). It is a pivotal tight junction protein and may be involved in signaling mechanisms regulating cell proliferation and differentiation (PMID: 22782886).

Storage

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Store at -20°C. Stable for one year after shipment.

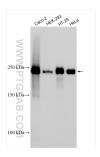
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

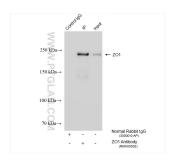
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

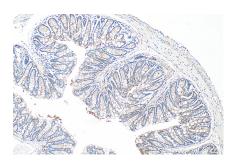
Selected Validation Data



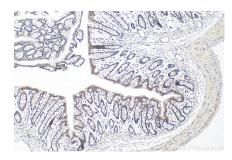
Various lysates were subjected to SDS PAGE followed by western blot with RMX00002 (ZO1 antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



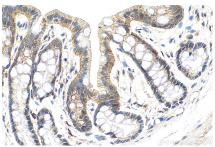
IP result of anti-ZO1 (IP:RMX00002, 4ug: Detection:RMX00002 1:20000) with HEK-293 cells lysate 1800 ug.



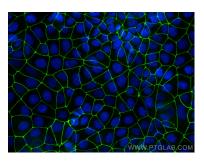
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using RMX00002 (ZO1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded rat colon tissue slide using RMX00002 (ZO1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with TrisEDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded rat colon tissue slide using RMX00002 (ZO 1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using ZO-1 antibody (RMX00002) at dilution of 1:1000 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).