For Research Use Only

CoraLite® Plus 488-conjugated ZO-1 Polyclonal antibody

www.ptglab.com

Catalog Number: CL488-21773

Featured Product

2 Publications

BC111712

7082

GeneID (NCBI):

UNIPROT ID:

Full Name:

Q07157

GenBank Accession Number:

Basic Information

Catalog Number: CL488-21773

1000 µg/ml Source: Rabbit Isotype:

Immunogen Catalog Number:

AG16454

tight junction protein 1 (zona occludens 1) Calculated MW:

1748 aa. 195 kDa Observed MW: 230 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions: IF 1:50-1:500

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications: FC (Intra), IF/ICC Cited Applications:

IF, IHC

Species Specificity:

human, Canine, mouse, rat, hamster

Cited Species: mouse

Positive Controls:

IF: MCF-7 cells, HUVEC cells

Background Information

Tight junction (or zonula occludens) form 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 signalling mechanisms regulating cell proliferation and differentiation (PMID: 22782886).

Notable Publications

Author	Pubmed ID	Journal	Application
Yunxia Xue	38428739	Mucosal Immunol	IF
Praveen Papareddy	38326335	Nat Commun	IHC

Storage

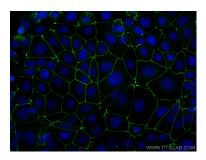
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

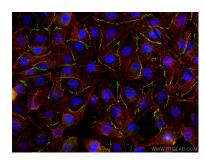
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

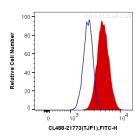
Selected Validation Data



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using Coralite® Plus 488 Z0-1 antibody (CL488-21773) at dilution of 1:200.



Immunofluorescent analysis of (4% PFA) fixed HUVEC cells using Coralite® Plus 488 ZO-1 antibody (CL488-21773) at dilution of 1:200.



1X10^6 MCF-7 cells were intracellularly stained with 0.4 ug Coralite® Plus 488 Anti-Human ZO-1 (CL488-21773) (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).