

# CoraLite® Plus 488-conjugated ZO-1 Monoclonal antibody

Catalog Number: **CL488-66452****Featured Product**

## Basic Information

**Catalog Number:**

CL488-66452

**Size:**

1000 µg/ml

**Source:**

Mouse

**Isotype:**

IgG1

**Immunogen Catalog Number:**

AG16454

**GenBank Accession Number:**

BC111712

**GeneID (NCBI):**

7082

**UNIPROT ID:**

Q07157

**Full Name:**

tight junction protein 1 (zona occludens 1)

**Calculated MW:**

1748 aa, 195 kDa

**Observed MW:**

230 kDa

**Purification Method:**

Protein G purification

**CloneNo.:**

1G4A1

**Recommended Dilutions:**

IF 1:50-1:500

**Excitation/Emission maxima wavelengths:**

493 nm / 522 nm

## Applications

**Tested Applications:**

IF/ICC

**Species Specificity:**

human, Canine

**Positive Controls:**

IF : MCF-7 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).

## Storage

**Storage:**

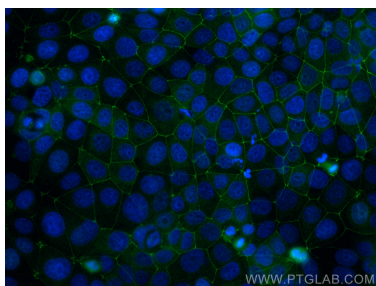
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

**Storage Buffer:**

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 (4% PFA) fixed MCF-7 cells using CoraLite® Plus 488 ZO-1 antibody (CL488-66452, Clone: 1G4A1 ) at dilution of 1:100.