

Rabbit anti ZO-3 Polyclonal Antibody

Alternative Name(s): tight junction protein 3 (zona occludens 3)

Order Information

Description: ZO-3
Catalogue: 630-030
Lot: See label
Size: 100ug/200ul
Host: Rabbit
Clone: nan

• Application: IHC(P), WB • Reactivity: hu, Ms, Rt,

ANTIGEN PREPARATION

A synthetic peptide from 902-919 amino acids of human ZO-3 protein. It is identical among human, mouse and rat species.

BACKGROUND

Tight junctions, or zona occludens, form a continuous barrier to fluids across the epithelium and endothelium. They function in regulation of paracellular permeability and in the maintenance of cell polarity, blocking the movement of transmembrane proteins between the apical and the basolateral cell surfaces. Zona occludens proteins ZO-1, -2, and -3 (also known as TJP1, 2, and 3) are peripheral membrane adaptor proteins that link junctional transmembrane proteins such as occludin and claudin to the actin cytoskeleton. ZO-1 and -2 are required for tight junction formation and function. ZO-1 expression is significantly reduced in many breast cancer lines. ZO-2 and ZO-3 are ubiquitously expressed within epithelial tight junctions, and unlike ZO-1, which is also expressed at cell junctions of cardiac myocytes, ZO-2 is not expressed in nonepithelial tissue. ZO-1 is a protein located on a cytoplasmic membrane surface of intercellular tight junctions. ZO-1 may be involved in signal transduction at cell-cell junctions. Two transcript variants encoding distinct isoforms have been identified for the ZO-1 gene. Diseases associated with ZO-1 dysfunction include Celiac Disease and Congenital Nephrotic Syndrome.

PURIFICATION

The Rabbit IgG is purified by Epitope Affinity Purification

FORMULATION

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

SPECIFICITY

This antibody recognizes human ZO-3 protein. It cross reacts to human, mice and rat.

STORAGE

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

APPLICATIONS/SUGGESTED WORKING DILUTIONS*

Western Blot: 0.1-1 μg/ml

• ELISA: 0.01-0.1 μg/ml

• Immunoprecipitation: 2-5 µg/ml

• IHC: 2-10 µg/ml

• Flow cytometry: Not tested

• Molecular Weight: 140.0

• Positive Control: Kidney Tissue

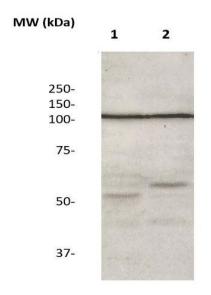
Cellular Location: Cell Membrane



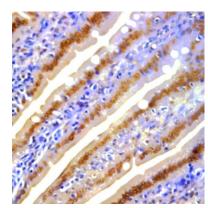
*Optimal dilutions should be determined by researchers for the specific applications.



DATA ATTACHMENTS



Western Blot: The whole lysate derived from A431 and Hela (Lane 1, 2 respectively) (20 ug/lane) immunoblotted by Rabbit anti – ZO-3 (Cat# 630-030) at 1:500. Observed a major immunoreactive band at molecular weight ~140kDa.



Immunohistochemistry: Mouse colon (FFPE) stained with Rabbit anti-ZO-3 (Cat# 630-030) at 1:200 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

REFERENCES