

# Anti-ZO3 Antibody

Rabbit polyclonal antibody to ZO3 Catalog # AP59948

#### Specification

# Anti-ZO3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>O95049</u> <u>O90XY1</u> Human, Mouse, Rat, Dog Rabbit Polyclonal 101397

#### Anti-ZO3 Antibody - Additional Information

Gene ID 27134

**Other Names** ZO3; Tight junction protein ZO-3; Tight junction protein 3; Zona occludens protein 3; Zonula occludens protein 3

**Target/Specificity** Recognizes endogenous levels of ZO3 protein.

Dilution WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

## Anti-ZO3 Antibody - Protein Information

Name TJP3

Synonyms ZO3

**Function** 

TJP1, TJP2, and TJP3 are closely related scaffolding proteins that link tight junction (TJ) transmembrane proteins such as claudins, junctional adhesion molecules, and occludin to the actin cytoskeleton (PubMed:<a href="http://www.uniprot.org/citations/16129888" target="\_blank">16129888</a>). The tight junction acts to limit movement of substances through the paracellular space and as a boundary between the compositionally distinct apical and basolateral plasma membrane domains of epithelial and endothelial cells. Binds and recruits PATJ



to tight junctions where it connects and stabilizes apical and lateral components of tight junctions (PubMed:<a href="http://www.uniprot.org/citations/16129888" target="\_blank">16129888</a>). Promotes cell-cycle progression through the sequestration of cyclin D1 (CCND1) at tight junctions during mitosis which prevents CCND1 degradation during M- phase and enables S-phase transition (PubMed:<a href="http://www.uniprot.org/citations/21411630" target="\_blank">21411630</a>). With TJP1 and TJP2, participates in the junctional retention and stability of the transcription factor DBPA, but is not involved in its shuttling to the nucleus (By similarity). Contrary to TJP2, TJP3 is dispensable for individual viability, embryonic development, epithelial differentiation, and the establishment of TJs, at least in the laboratory environment (By similarity).

#### **Cellular Location**

Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, tight junction. Nucleus. Note=Exhibits predominant nuclear expression in proliferating cells but is exclusively junctionally expressed after confluence is reached (PubMed:23608536). Shows an epithelial-specific tight junction localization in a TJP1/TJP2- dependent fashion (By similarity). {ECO:0000250|UniProtKB:Q9QXY1, ECO:0000269|PubMed:23608536}

#### Anti-ZO3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Anti-ZO3 Antibody - Images



Western blot analysis of ZO3 expression in SGC7901 (A), mouse liver (B) whole cell lysates.

## Anti-ZO3 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ZO3. The exact sequence is proprietary.