

**TJP3 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP16653a****Specification**

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**TJP3 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [O95049](#)**TJP3 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 27134**Other Names**

Tight junction protein ZO-3, Tight junction protein 3, Zona occludens protein 3, Zonula occludens protein 3, TJP3, ZO3

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**TJP3 Antibody (N-term) Blocking Peptide - 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}

**TJP3 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**TJP3 Antibody (N-term) Blocking Peptide - Images****TJP3 Antibody (N-term) Blocking Peptide - Background**

TJP3 is a member of the family of membrane-associated guanylate kinase-like proteins (MAGUK) that associate with intracellular junctions (Itoh et al., 1999 [PubMed:10601346]).

**TJP3 Antibody (N-term) Blocking Peptide - References**

Voss, M., et al. BMC Immunol. 10, 53 (2009) ; Grimwood, J., et al. Nature 428(6982):529-535(2004) Roh, M.H., et al. J. Biol. Chem. 277(30):27501-27509(2002) Kausalya, P.J., et al. FEBS Lett. 505(1):92-96(2001) Itoh, M., et al. J. Cell Biol. 147(6):1351-1363(1999)