

Product datasheet for **AP26409PU-N**

TJP2 (411-467) Guinea Pig Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Immunohistochemistry on Frozen Sections. Immunofluorescence. Western blot. The typical starting working dilution is 1/50.
Reactivity:	Human, Mouse
Host:	Guinea Pig
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	Amino acids 411-467 of Human ZO-2
Specificity:	This antibody recognizes human zona occludens 2 (ZO-2).
Formulation:	PBS State: Purified State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% BSA Preservative: 0.02% Sodium Azide
Concentration:	lot specific
Purification:	Protein A Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C. DO NOT FREEZE!
Stability:	Shelf life: one year from despatch.
Gene Name:	tight junction protein 2
Database Link:	Entrez Gene 9414 Human Q9UDY2



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Background:

Zona occludens 2 (ZO-2) is an ~160 kDa tight junction protein belonging to the membrane-associated guanylate kinase (MAGUK) family. Members of this family are involved in epithelial and endothelial intercellular junctions. They each contain at least one PSD95/Dlg/ZO-1 (PDZ) domain, a Src homology 3 (SH3) domain, and an enzymatically inactive guanylate kinase domain. PDZ domains are 90-amino acid protein-protein binding domains that recognize at least a 3-residue peptide motif in the COOH termini of their binding partners. PDZ domain-containing proteins, like ZO-2, typically act as scaffolding proteins that organize membrane receptors and cytosolic proteins into multimeric signaling complexes often at the sites of cell-cell contact. The effectiveness and stability of the epithelial barrier depends on a complex of proteins composing different intercellular junctions, which include tight junctions, adherens junctions, and desmosomes.

ZO-2 can interact with zona occludens 1 (ZO-1). Furthermore, the PDZ2 domain of ZO-2 was shown to interact with connexin-43, the predominant connexin in epithelial and most other tissues which is involved in cell growth control and embryonic development.

Synonyms:

Tight junction protein 2, Tight junction protein ZO-2, ZO2, X104