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**anti-ZO-1**

Cat #: HM1400  
Goat polyclonal IgG  
0.2 µg/µl, store at 4 °C

For research use only

**BACKGROUND**

Tight junctions are complexes of proteins that create intercellular boundaries between the plasma membrane domains of epithelial and endothelial cells. Many of the tight junction-associated proteins are members of the membrane-associated guanylate kinase (MAGUK) family and include occludin, ZO-1, ZO-2 and ZO-3. These proteins are thought to have both structural and signaling roles, and are characteristically defined by three protein-protein interaction modules: the PDZ domain, the SH3 domain and the guanylate kinase (GuK) domain. ZO-1 forms complexes with either ZO-2 or ZO-3. In addition, these proteins can also associate with claudin, occludin and F-actin, at tight junction stands, where they provide a linkage between the actin cytoskeleton and the tight junction. 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.

**APPLICATION**

This antibody specifically reacts with ZO-1 of human, mouse and rat origin.

The antibody can be used in Western blotting, immunoprecipitation and immunohistochemistry.

**IMMUNOGEN**

A synthetic peptide derived from N-terminus of human ZO-1 protein.

**STORAGE**

This antibody is stable for 12 months when stored at 2-8°C.

**REFERENCES**

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