

Anti-ZO1 tight junction protein antibody [EPR19945-224] ab221546

Recombinant RabMAb

★★★★★ [2 Abreviews](#) [5 References](#) [7 Images](#)

Overview

Product name	Anti-ZO1 tight junction protein antibody [EPR19945-224]
Description	Rabbit monoclonal [EPR19945-224] to ZO1 tight junction protein
Host species	Rabbit
Tested applications	Suitable for: IHC-P Unsuitable for: Flow Cyt, ICC/IF, IHC-Fr or WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human bronchial epithelium, breast cancer and kidney tissue. Mouse kidney tissue. Rat spleen tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR19945-224

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab221546 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (2)	1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt, ICC/IF, IHC-Fr or WB.

Target

Function The N-terminal may be involved in transducing a signal required for tight junction assembly, while the C-terminal may have specific properties of tight junctions. The alpha domain might be involved in stabilizing junctions.

Tissue specificity The alpha-containing isoform is found in most epithelial cell junctions. The short isoform is found both in endothelial cells and the highly specialized epithelial junctions of renal glomeruli and Sertoli cells of the seminiferous tubules.

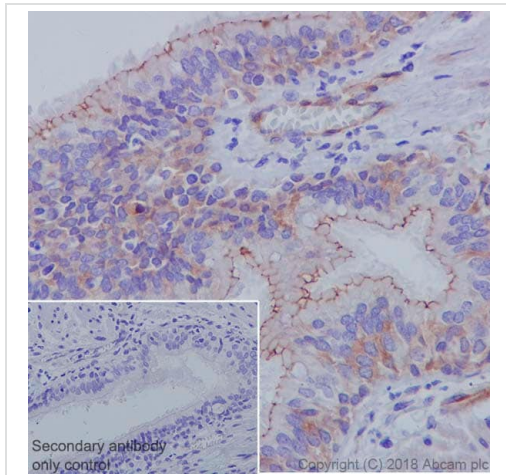
Sequence similarities Belongs to the MAGUK family.
Contains 1 guanylate kinase-like domain.
Contains 3 PDZ (DHR) domains.
Contains 1 SH3 domain.
Contains 1 ZU5 domain.

Domain The second PDZ domain mediates interaction with GJA12.

Post-translational modifications Phosphorylated. Dephosphorylated by PTPRJ.

Cellular localization Cell membrane. Cell junction > tight junction. Movement of ZO-1 from the cytoplasm to membrane is an early event occurring concurrently with cell-cell contact.

Images

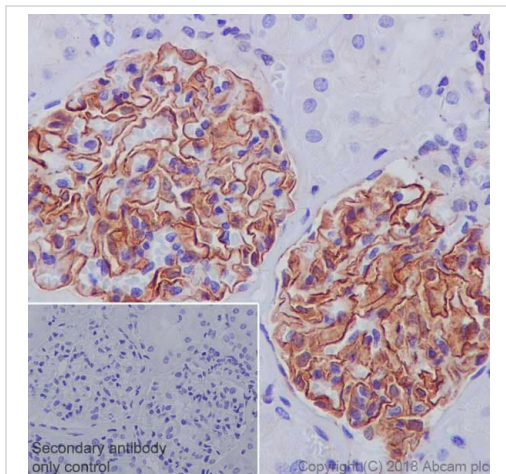


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ZO1 tight junction protein antibody [EPR19945-224] (ab221546)

Immunohistochemical analysis of paraffin-embedded human bronchial epithelium tissue labeling ZO1 tight junction protein with ab221546 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous staining in epithelial and endothelial cells of human bronchial epithelium (PMID: 17585317) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

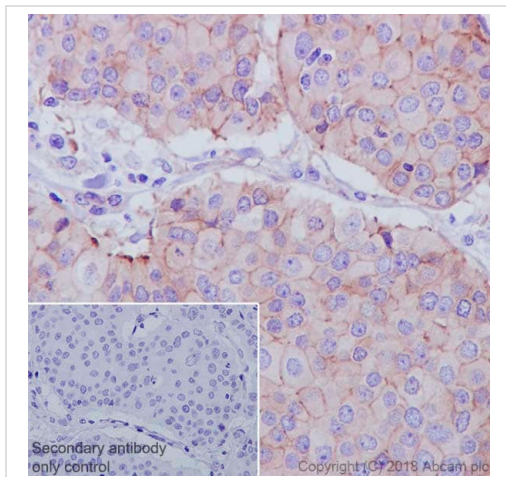


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ZO1 tight junction protein antibody [EPR19945-224] (ab221546)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling ZO1 tight junction protein with ab221546 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous and cytoplasmic in glomerulus of human kidney (PMID: 18618131) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

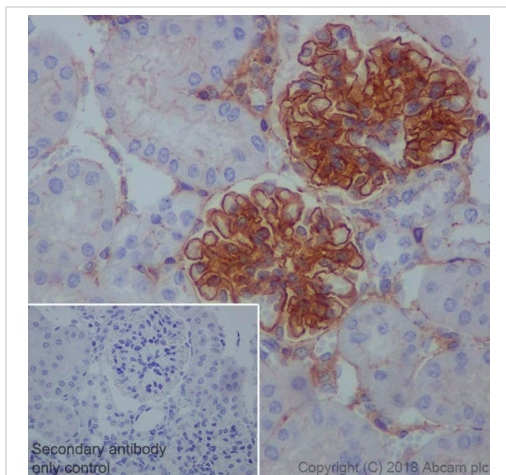


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ZO1 tight junction protein antibody [EPR19945-224] (ab221546)

Immunohistochemical analysis of paraffin-embedded human breast cancer tissue labeling ZO1 tight junction protein with ab221546 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous and cytoplasmic in breast cancer (PMID: 9846967) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

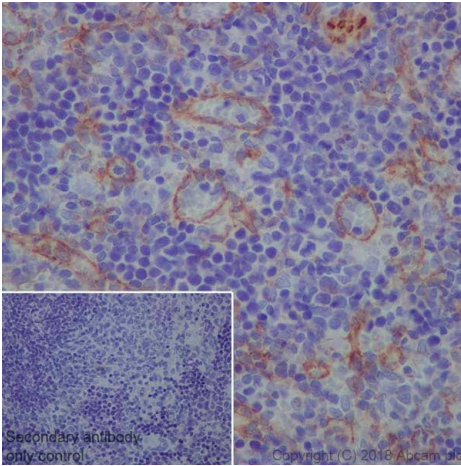


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ZO1 tight junction protein antibody [EPR19945-224] (ab221546)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling ZO1 tight junction protein with ab221546 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous and cytoplasmic in glomerular of mouse kidney (PMID: 18618131) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

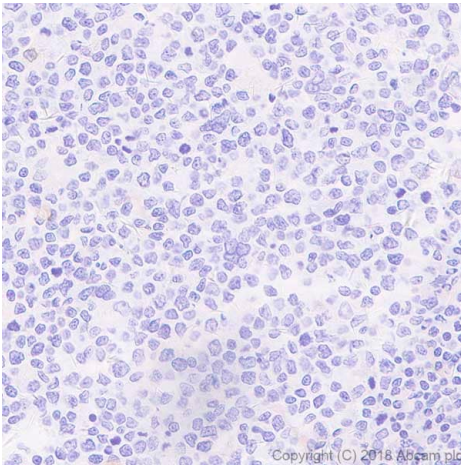


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ZO1 tight junction protein antibody [EPR19945-224] (ab221546)

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling ZO1 tight junction protein with ab221546 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous and cytoplasmic in endothelial cells of rat spleen (PMID: 17585317) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ZO1 tight junction protein antibody [EPR19945-224] (ab221546)

Negative control - Immunohistochemical analysis of paraffin-embedded human liver tissue labeling ZO1 tight junction protein with ab221546 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Negative staining in lymphocytes of human tonsil (PMID: 17585317) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

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