

# Anti-ZO1 tight junction protein antibody ab59720

★★★★☆ [21 Abreviews](#) [124 References](#) [6 图像](#)

### 概述

产品名称	Anti-ZO1 tight junction蛋白抗体
描述	兔多克隆抗体to ZO1 tight junction蛋白
宿主	Rabbit
特异性	We are re-evaluating this product to ensure it meets our strict quality criteria. Unfortunately it will not be available to order during this time. We recommend <a href="#">ab216880</a> as an alternative rabbit polyclonal which works in ICC/IF, WB and IHC-P.
经测试应用	适用于: ICC/IF, Flow Cyt, WB
种属反应性	与反应: Chicken, Dog, Human 预测可用于: Mouse, Pig 
免疫原	Corresponding to amino acids 432-1150 of Human ZO1 tight junction protein
常规说明	ab59720 recognises both ZO1 tight junction alpha-minus and alpha-plus isoforms. The protein is abundant in endothelial cells and the highly specialized epithelial junctions. Customers report variable results in IHC-Fr and IHC-P application; though we have nice image for IHC-Fr. If you would like to use ab59720 in IHC-Fr then we suggest using ethanol for fixation instead of acetone. IHC-Fr and IHC-P are therefore not covered by Abpromise guarantee. The immunogen sequence for this product has 92.5% homology with the mouse sequence however in our hands we have not been able to produce positive data with mouse samples. We have also received mixed feedback for Pig cross reactivity so we no longer guarantee this species. One of the reviewer have successfully used this antibody with pig samples so we are keen to receive more feedback from other customers.

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	Preservative: 0.02% Sodium azide Constituents: PBS, 0.1% BSA
纯化说明	0.2µm filtered.
克隆	多克隆

同种型

IgG

## 应用

**The Abpromise guarantee** **Abpromise™** 承诺保证使用 ab59720 于以下的经测试应用

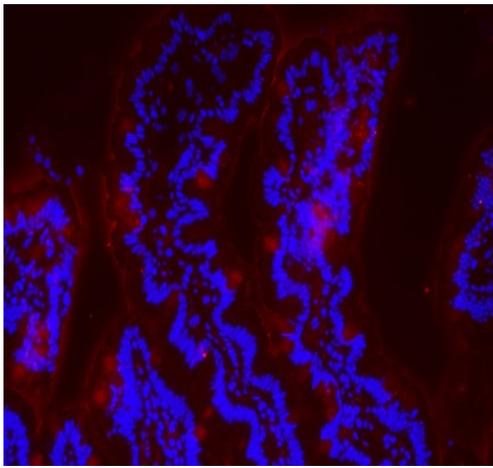
“应用说明”部分 下显示的仅为推荐的起始稀释度；实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF	★★★★★ (5)	Use a concentration of 1 µg/ml. Fix cells with 4% paraformaldehyde and permeabilize with PBS + 0.1% Saponin (+ 0.5% BSA).
Flow Cyt		1/50. <b>ab171870</b> - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/50 - 1/250. Predicted molecular weight: 194 kDa. Abcam recommends BSA blocking.

## 靶标

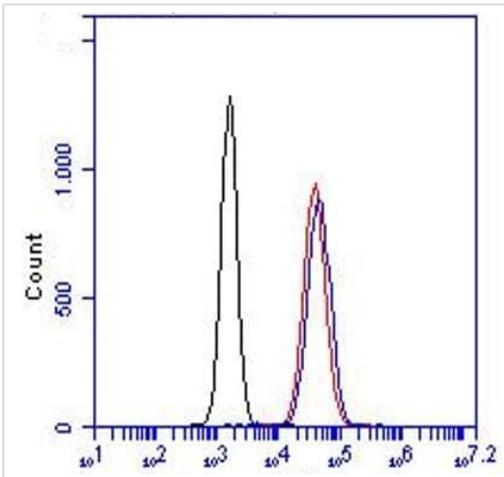
功能	The N-terminal may be involved in transducing a signal required for tight junction assembly, while the C-terminal may have specific properties of tight junctions. The alpha domain might be involved in stabilizing junctions.
组织特异性	The alpha-containing isoform is found in most epithelial cell junctions. 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.
序列相似性	Belongs to the MAGUK family. Contains 1 guanylate kinase-like domain. Contains 3 PDZ (DHR) domains. Contains 1 SH3 domain. Contains 1 ZU5 domain.
结构域	The second PDZ domain mediates interaction with GJA12.
翻译后修饰	Phosphorylated. Dephosphorylated by PTPRJ.
细胞定位	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.

## 图片



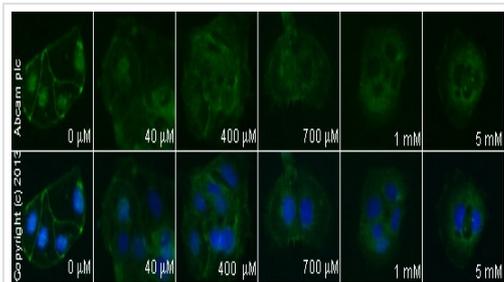
Immunofluorescence - Anti-ZO1 tight junction protein antibody (ab59720)

Immunofluorescence staining in HUVEC cells.



Flow Cytometry - Anti-ZO1 tight junction protein antibody (ab59720)

Flow cytometry with HUVEC cells. The black line represents the cells only, the red line the control and the blue line ab59720 at 10 µg/ml.

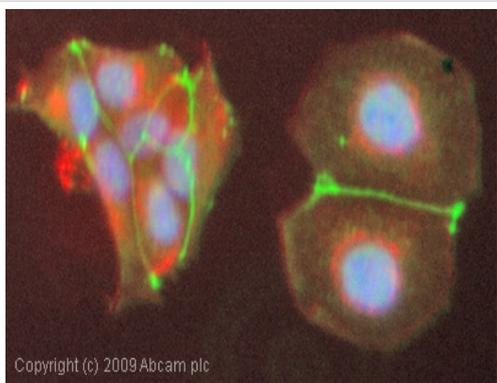


Immunocytochemistry/ Immunofluorescence - Anti-ZO1 tight junction protein antibody (ab59720)

ab59720 staining ZO1 in Caco-2 cells treated with (±)-palmitoylcarnitine chloride (**ab141122**), by ICC/IF. Membranar ZO1 expression loss correlates with increased concentration of (±)-palmitoylcarnitine chloride, as described in literature.

The cells were incubated at 37°C for 1 hour in media containing different concentrations of **ab141122** ((±)-palmitoylcarnitine chloride) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab59720 (0.5 µg/ml)

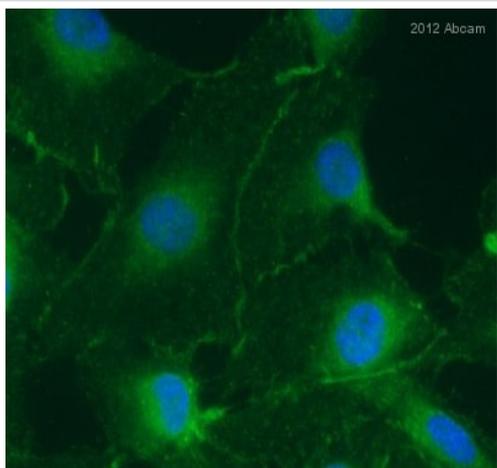
was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 anti-rabbit polyclonal antibody (**ab96899**) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.



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Immunocytochemistry/ Immunofluorescence - Anti-ZO1 tight junction protein antibody (ab59720)

ICC/IF image of ab59720 stained MCF-7 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab59720, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



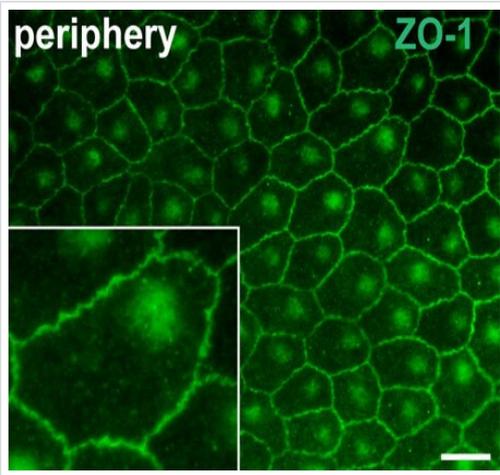
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Immunocytochemistry/ Immunofluorescence - Anti-ZO1 tight junction protein antibody (ab59720)

This image is courtesy of an anonymous Abreview

Immunofluorescence analysis of HUVEC cells, staining ZO1 tight junction protein with ab59720.

Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 1% BSA for 30 minutes at 25°C. Samples were incubated with primary antibody (1/200 in diluent) for 16 hours at 4°C. An AlexaFluor®488-conjugated goat anti-rabbit polyclonal IgG (1/500) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-ZO1 tight junction protein antibody (ab59720)

Image from Kokkinopoulos I et al., PLoS One. 2011 Apr 22;6(4):e18921. Fig 6.; doi:10.1371/journal.pone.0018921; April 22, 2011, PLoS ONE 6(4): e18921.

Immunofluorescence analysis of murine peripheral retinal pigmented epithelium (RPE) cells, staining ZO1 tight junction protein with ab59720.

Cells were fixed with 4% paraformaldehyde for 10 minutes at room temperature. Cells were blocked in 10% BSA and 0.5% Triton-X 100 for 2 hours at room temperature before being incubated with primary antibody (1/100) in blocking solution overnight at room temperature. An AlexaFluor®-conjugated anti-rabbit IgG was used as the secondary antibody.

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