



Datasheet for ABIN687337
anti-Occludin antibody (AA 431-522)



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Overview

Quantity:	100 µL
Target:	Occludin (OCLN)
Binding Specificity:	AA 431-522
Reactivity:	Human, Mouse, Pig
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Occludin antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from mouse Occludin
Isotype:	IgG
Predicted Reactivity:	Rat,Dog,Cow,Horse,Guinea Pig
Purification:	Purified by Protein A.

Target Details

Target:	Occludin (OCLN)
Alternative Name:	Occludin (OCLN Products)

Target Details

Background: May play a role in the formation and regulation of the tight junction (TJ) paracellular permeability barrier.
Subcellular location: Cell membrane
Synonyms: Ocl, AI53564, Occludin, OcIn

Gene ID: 18260

UniProt: [Q61146](#)

Pathways: [Cell-Cell Junction Organization](#), [Hepatitis C](#)

Application Details

Application Notes: WB 1:300-5000
ELISA 1:500-1000
FCM 1:20-100
IHC-P 1:200-400
IF(IHC-P) 1:50-200
IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: 0.01M TBS(pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

Publications

Product cited in: Sun, Liu, Xue, Wang: "Effects of insulin combined with idebenone on blood-brain barrier permeability in diabetic rats." in: **Journal of neuroscience research**, Vol. 93, Issue 4, pp. 666-77,

(2015) ([PubMed](#)).

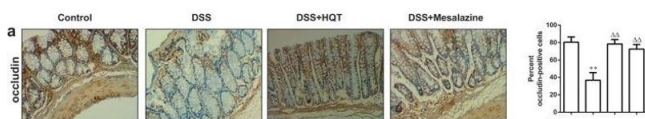
Zhao, Qin, Han, Wang, Zhang, Liu: "α-Conglycinin reduces the tight junction occludin and ZO-1 expression in IPEC-J2." in: **International journal of molecular sciences**, Vol. 15, Issue 2, pp. 1915-26, (2014) ([PubMed](#)).

Pan, Qin, Zhao, Wang, Liu, Che: "Effects of soybean agglutinin on mechanical barrier function and tight junction protein expression in intestinal epithelial cells from piglets." in: **International journal of molecular sciences**, Vol. 14, Issue 11, pp. 21689-704, (2013) ([PubMed](#)).

Zhao, Qin, Sun, Che, Bao, Zhang: "Effects of soybean agglutinin on intestinal barrier permeability and tight junction protein expression in weaned piglets." in: **International journal of molecular sciences**, Vol. 12, Issue 12, pp. 8502-12, (2012) ([PubMed](#)).

Gu, Xue, Wei, Zhang, Li: "Calcium-activated potassium channel activator down-regulated the expression of tight junction protein in brain tumor model in rats." in: **Neuroscience letters**, Vol. 493, Issue 3, pp. 140-4, (2011) ([PubMed](#)).

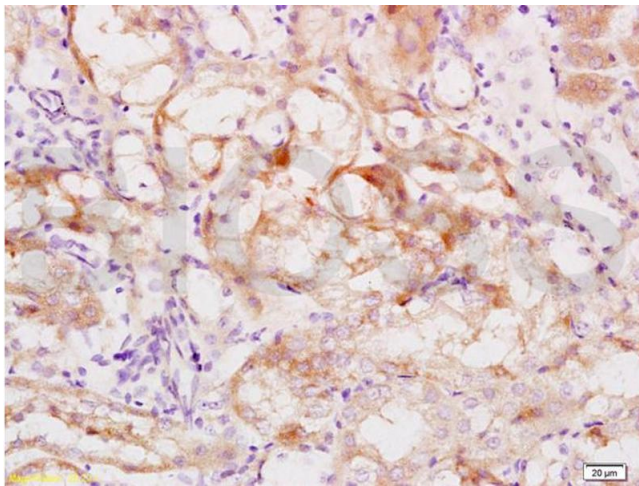
Images



Immunohistochemistry (Paraffin-embedded Sections)

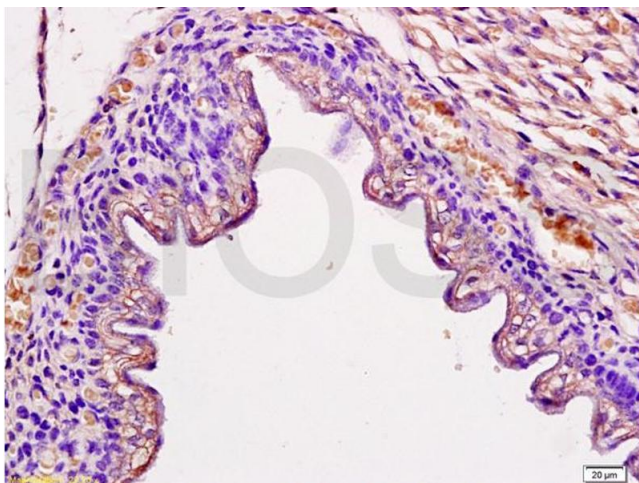
Image 1. HQT regulates epithelial proliferation in the colonic mucosa of mice with DSS-induced acute and chronic colitis. Mice were administered regular water (control) or 3.5 % DSS for 7 days followed by treatment with HQT for 7 days. (a-c) Immunohistochemical analysis of tight junction proteins occluding, ZO-1 and proliferating cells detected based on Ki67 in colon sections in DSS-induced acute colitis mice. (magnification, x200). Graphical representation of the percentage of occluding, ZO-1 and Ki67-positive cells in the mid-colon. Results are expressed as means±SD of three independent experiments, n=8 mice per group. *p<0.05, **p<0.001 vs. the control group, p<0.05, p<0.001 vs. DSS-treated mice. Mice received three cycles of DSS treatment

(2.5 %), each cycle consisting of 7 days of water containing DSS followed by 14 days of tap water, followed by treatment with HQT for 7 days. (d) Immunohistochemical analysis of proliferating cells detected based on Ki67 in colon sections in mice with DSS-induced chronic colitis (magnification, x200). Graphical representation of the percentage of Ki67-positive cells in the mid-colon. Results are expressed as means \pm SD of three independent experiments, n=8 mice per group. *p<0.05, **p<0.001 vs. the control group, p<0.05, p<0.001 vs. DSS-treated mice. - figure provided by CiteAb. Source: PMID27982094



Immunohistochemistry

Image 2. Formalin-fixed and mouse kidney tissue labeled with Anti-Occludin Polyclonal Antibody, Unconjugated (ABIN687337) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry

Image 3. Formalin-fixed and paraffin embedded mouse embryo tissue labeled with Anti-Occludin Polyclonal Antibody, Unconjugated (ABIN687337) at 1:100 followed by conjugation to the secondary antibody and DAB staining

Please check the [product details page](#) for more images. Overall 9 images are available for ABIN687337.



Successfully validated (Immunofluorescence (IF))

by [Confocal Imaging Core, Beth Israel Deaconess Medical Center](#)

Report Number: 029632

Date: Mar 23 2014

Lot Number: 990698W

Method validated: Immunofluorescence (IF)

Positive Control: [Mouse stomach tissue](#)

Negative Control: [Human fat tissue](#)

Notes: Signal was detected in positive control sample and not in negative control sample.

Primary Antibody: - Antibody: Occludin (OCLN) - Catalog number: ABIN687337 - Supplier: Bioss - Supplier catalog number: bs-1495r - Lot number: 990698W

Secondary Antibody: - Antibody: Donkey anti-Rabbit IgG (Heavy & Light Chain) Antibody (Alexa 647) - Supplier: Jackson Immuno Research - Catalog number: 711-605-152

Isotype: - Antibody: Rabbit IgG - Supplier: Bioss - Catalog number: bs-0295p

Controls:

- Positive control: PPFE mouse stomach tissue
- Negative Control: PPFE human fat tissue
- Isotype antibody control: tissue sections treated with Rabbit IgG Isotype at 1ug/ul , Bioss bs-0295p
- Secondary antibody only control: positive and negative control tissue sections treated with Goat anti-Rabbit Alexa 647 secondary antibody only.

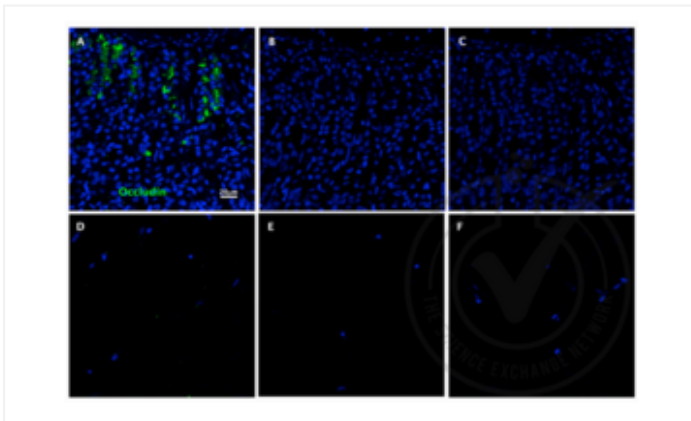
Protocol:

- Paraffin embedded positive and negative control tissue sections were deparaffinized and undergone antigen retrieval using 10 mM Sodium Citrate pH6 in a pressure cooker for 10 min.
- The tissue sections were incubated with 1 mg/mL Sodium borohydride for 10 min at room temperature to block autofluorescent background signal. The sections were then rinsed three times in TBS for 5 min each at RT.
- Tissue sections were blocked in 1 X TBS / 5% normal donkey serum for 60 min at RT.
- Tissue sections were incubated with primary antibody diluted 1:200 in 1X PBS / 5% normal donkey serum overnight at 4°C.
- Tissue sections were rinsed three times in TBS for 5 min each at RT.
- Cells were incubated with secondary antibody diluted 1:200 in 1X PBS / 5% normal donkey serum for 60 min at RT in dark.
- Tissue sections were rinsed three times in TBS for 5 min each at RT.

- Coverslips were mounted on slides with Prolong Gold anti-fade mounting media (Invitrogen)
 - IF stained tissue sections were imaged with a Zeiss LSM 510 Meta confocal microscope.
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- Experimental Notes:
- No challenges notes
 - OCLN is recommended to staining of mouse stomach tissue according to this protocol.
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Image for Validation report #029632



Validation image no. 1 for anti-Occludin (OCLN) (AA 431-522) antibody (ABIN687337)

Figure 1: Immunostaining (green) of mouse stomach tissue (A-C) and human fat tissue (D-F) with anti-OCLN (A, D), isotype control antibody (B, E), or with secondary alone (C, F). Tissues were counterstained with DAPI (blue).