




Product datasheet

Anti-Occludin antibody - Neural Stem Cell Marker ab168986

★★★★☆ [4 Abreviews](#) [37 References](#) [4 Images](#)

Overview

Product name	Anti-Occludin antibody - Neural Stem Cell Marker
Description	Rabbit polyclonal to Occludin - Neural Stem Cell Marker
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Dog, Orangutan 
Immunogen	Recombinant full length protein corresponding to Human Occludin aa 1 to the C-terminus. NP_002529.1 Database link: Q16625  Run BLAST with  Run BLAST with
Positive control	Human and Mouse liver lysates; Occludin-transfected 293T cell line lysate This antibody gave a positive result in IHC in the following FFPE tissue: Human normal kidney
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</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: 7.4 Constituent: 100% PBS
Purity	Protein A purified
Clonality	Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab168986 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
WB	★★★★★ (2)	Use a concentration of 1 µg/ml. Predicted molecular weight: 59 kDa.
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

May play a role in the formation and regulation of the tight junction (TJ) paracellular permeability barrier. It is able to induce adhesion when expressed in cells lacking tight junctions.

Tissue specificity

Localized at tight junctions of both epithelial and endothelial cells. Highly expressed in kidney. Not detected in testis.

Involvement in disease

Defects in OCLN are the cause of band-like calcification with simplified gyration and polymicrogyria (BLCPMG) [MIM:251290]; also known as pseudo-TORCH syndrome. BLCPMG is a neurologic disorder with characteristic clinical and neuroradiologic features that mimic intrauterine TORCH infection in the absence of evidence of infection. Affected individuals have congenital microcephaly, intracranial calcifications, and severe developmental delay.

Sequence similarities

Belongs to the ELL/occludin family.
Contains 1 MARVEL domain.

Domain

The C-terminal is cytoplasmic and is important for interaction with ZO-1. Sufficient for the tight junction localization. Involved in the regulation of the permeability barrier function of the tight junction (By similarity). The first extracellular loop participates in an adhesive interaction.

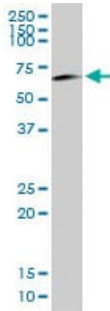
Post-translational modifications

Phosphorylated upon DNA damage, probably by ATM or ATR. Dephosphorylated by PTPRJ. The tyrosine phosphorylation on Tyr-398 and Tyr-402 reduces its ability to interact with TJP1.

Cellular localization

Membrane. Cell junction > tight junction.

Images



Western blot - Anti-Occludin antibody - Neural Stem Cell Marker (ab168986)

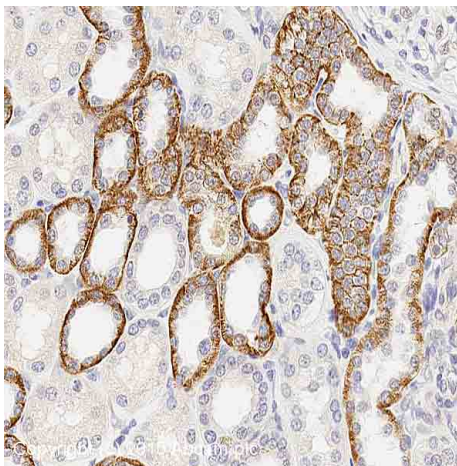
Anti-Occludin antibody - Neural Stem Cell Marker (ab168986) at 1 µg/ml + Human liver lysate at 50 µg

Secondary

Goat Anti-Rabbit IgG (H+L)-HRP at 1/7500 dilution

Developed using the ECL technique.

Predicted band size: 59 kDa

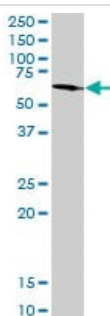


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Occludin antibody - Neural Stem Cell Marker (ab168986)

IHC image of Occludin staining in Human normal kidney formalin fixed paraffin embedded tissue section*, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab168986, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Western blot - Anti-Occludin antibody - Neural Stem Cell Marker (ab168986)

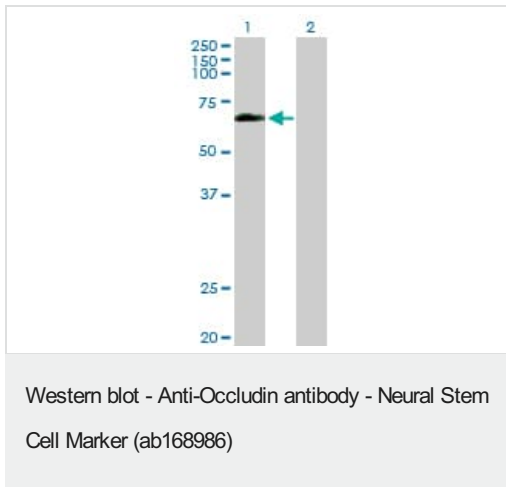
Anti-Occludin antibody - Neural Stem Cell Marker (ab168986) at 1 µg/ml + Mouse liver lysate at 50 µg

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Goat Anti-Rabbit IgG (H+L)-HRP at 1/7500 dilution

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All lanes : Anti-Occludin antibody - Neural Stem Cell Marker (ab168986) at 1 µg/ml

Lane 1 : Occludin-transfected 293T cell line lysate

Lane 2 : Non-transfected 293T cell line lysate

Secondary

All lanes : Goat Anti-Rabbit IgG at 1/7500 dilution

Developed using the ECL technique.

Predicted band size: 59 kDa

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