

Product datasheet

Anti-Occludin antibody [EPR8208] - BSA and Azide free ab240150

Recombinant RabMAb

2 Images

Overview

Product name	Anti-Occludin antibody [EPR8208] - BSA and Azide free
Description	Rabbit monoclonal [EPR8208] to Occludin - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB Unsuitable for: IP
Species reactivity	Reacts with: Mouse, Rat, Human, Recombinant fragment
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal kidney tissue lysate. HepG2, HUVEC, Rat-1, and bEnd.3 whole cell lysates. Mouse and rat spinal cord and small intestine tissue lysates.
General notes	<p>ab240150 is the carrier-free version of ab167161.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <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>

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR8208
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab240150 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		Use at an assay dependent concentration. Predicted molecular weight: 59 kDa.

Application notes Is unsuitable for IP.

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.

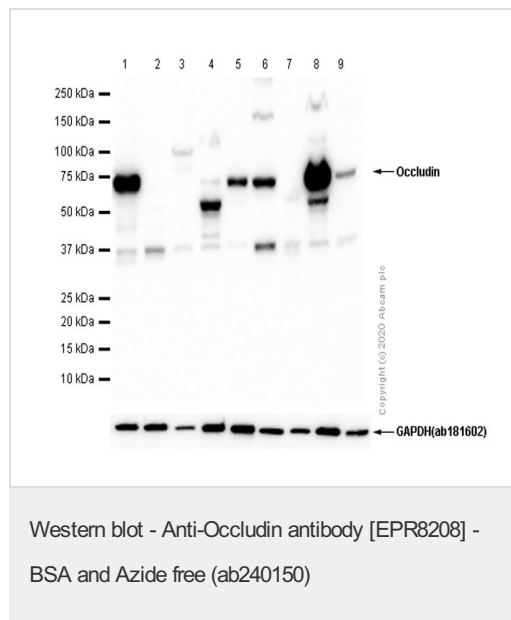
Post-translational modifications

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



All lanes : Anti-Occludin antibody [EPR8208] ([ab167161](#)) at 1/1000 dilution (Purified)

Lane 1 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate

Lane 2 : HUVEC (Human umbilical vein endothelial cell) whole cell lysate

Lane 3 : bEnd.3 (Mouse brain endothelioma) whole cell lysate

Lane 4 : Mouse brain lysate

Lane 5 : C57 mouse spinal cord lysate

Lane 6 : Mouse small intestine lysate

Lane 8 : Rat spinal cord lysate

Lane 9 : Rat small intestine lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 59 kDa

Observed band size: 65 kDa

The molecular weight observed is consistent as what is described in PMID: 17332770, PMID: 24884662 and PMID: 15054114.

Although some papers support the expression of Occludin in HUVEC (PMID:31057027, 29927318) and bEnd.3 (PMID: 31096970), [ab167161](#) cannot detect band of interest in these cell lines.

The expression of occludin in brain, spinal cord and intestine is consistent with what has been described in PMID: 31511021, PMID: 30742658 and PMID: 29927318.

Blocking/Diluting buffer: 5% NFDm/TBST

Loading Control: Rabbit monoclonal [EPR16891] to GAPDH

(ab181602)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab167161).

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

Anti-Occludin antibody [EPR8208] - BSA and Azide free (ab240150)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors