

Occludin Recombinant Mouse Monoclonal Antibody (OC-3F10), Alexa Fluor™ Plus 488

Product Details	
Size	50 µL
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Expression system	Expi293
Class	Recombinant Monoclonal
Type	Antibody
Clone	OC-3F10
Conjugate	Alexa Fluor™ Plus 488
Excitation/Emission Max	493/518 nm
Immunogen	GST fusion protein consisting of the C-terminal region (~150aa) of human occludin.
Form	Liquid
Concentration	1.0 mg/mL
Purification	Protein A/G
Storage buffer	proprietary buffer, pH 6.5
Contains	0.008% Bromonitrodioxane, 0.008% Methylisothiazolone
Storage conditions	4° C, store in dark, DO NOT FREEZE!

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	1:2,000	-
Flow Cytometry (Flow)	0.063-0.25 µg/test	-

Product Specific Information

Alexa Fluor™ Plus recombinant antibodies are conjugated using new, proprietary dye chemistry so you can generate stunning data. Alexa Fluor™ Plus antibodies represent an advancement in fluorescent conjugate technology. Alexa Fluor™ Plus antibodies provide brighter signal compared to leading Alexa Fluor™ antibodies, providing you with better signal-to-noise for your critical experiments. These antibodies show better specificity and lot-to-lot consistency as these are recombinant antibodies, generated by cloning specific genes for the desired antibodies into an expression vector and expressed in vitro.

Using conjugate solutions: Centrifuge the protein conjugate solution briefly in a microcentrifuge before use; add only the supernatant to the experiment. This step will help eliminate any protein aggregates that may have formed during storage, thereby reducing nonspecific background staining.

Applications Tested: This OC-3F10 antibody has been tested by immunocytochemistry and flow cytometric analysis of Caco-2 cells. This may be used for immunocytochemistry at 0.5 µg/mL and for flow cytometry at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

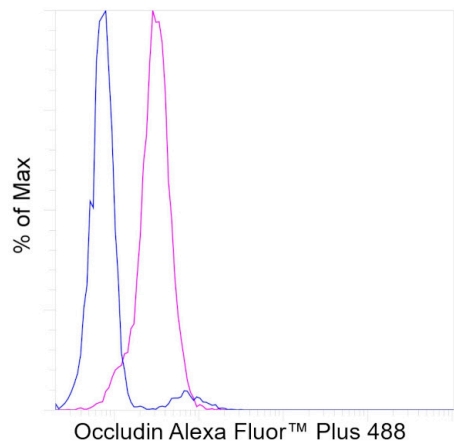
Excitation: 494 nm; Emission: 519 nm; Laser: Blue Laser

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Occludin Recombinant Mouse Monoclonal Antibody (OC-3F10), Alexa Fluor™ Plus 488

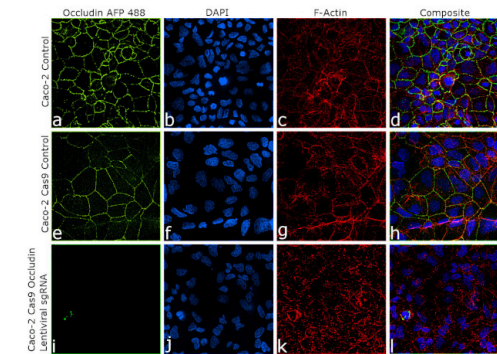
Occludin Antibody (740006MP488)

Antibody specificity was demonstrated by CRISPR-Cas9 mediated genome editing of target protein using LentiArray™ Lentiviral sgRNA (Product # A32042, AssayID CRISPR777079_LV) and LentiArray Cas9 Lentivirus (Product # A32064). Loss of signal was observed for Occludin in Caco-2 Cas9 cell line transduced with Occludin Lentiviral sgRNA (blue histogram) compared to the control Cas9 cells (pink histogram) using Occludin Recombinant Mouse Monoclonal Antibody (OC-3F10), Alexa Fluor™ Plus 488 (Product # 740006MP488) antibody. {KO}



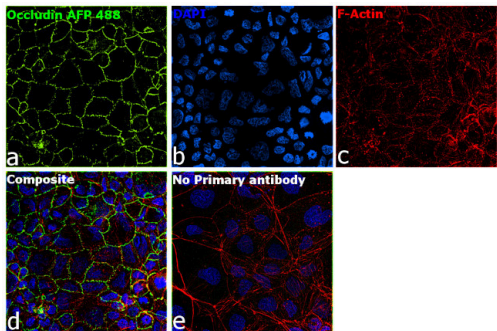
Occludin Antibody (740006MP488) in ICC/IF

CRISPR-Cas9 mediated genome editing of Occludin (as confirmed by next generation sequencing) was achieved by using LentiArray™ Lentiviral sgRNA (Product # A32042, AssayID CRISPR777079_LV) and LentiArray Cas9 Lentivirus (Product # A32064). Immunofluorescence analysis was performed on wild type Caco-2 cells (panel a-d), Caco-2 Cas9 control cells (panel e-h) and Caco-2 Cas9 cell line transduced with Occludin Lentiviral sgRNA cells (panel i-l). Cells were fixed, permeabilized, and labelled with Occludin Recombinant Mouse Monoclonal Antibody (OC-3F10), Alexa Fluor™ Plus 488 (Product # 740006MP488, 1:2,000) at 4 degree celsius overnight. Nuclei (blue) were stained using ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962), and Rhodamine Phalloidin (Product # R415, 1:300) was used for cytoskeletal F-actin (red) staining. Loss of signal in sgRNA transduced cells using the LentiArray™ CRISPR product line confirms that antibody is specific to Occludin (panel (i-l)). The images were captured at 60X magnification.



Occludin Antibody (740006MP488) in ICC/IF

Immunofluorescent analysis of Occludin was performed using 70% confluent Caco-2 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton X-100 for 15 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were stained with Occludin Recombinant Mouse Monoclonal Antibody Alexa Fluor™ Plus 488 (Product # 740006MP488, 1:2,000) at 4 degree celsius overnight. Panel a) shows representative images of cells that were stained for detection and localization of Occludin. Panel b) shows representative images of cells stained for nuclei, using ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). Panel c) represents cytoskeletal F-actin staining using Rhodamine Phalloidin (Product # R415, 1:300). Panel d) is a composite image of panels a, b, and c, clearly demonstrating cell membrane localization of Occludin. Panel e) represents no primary antibody control to assess the background. The images were captured at 60X magnification.



View more figures on thermofisher.cn

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.