

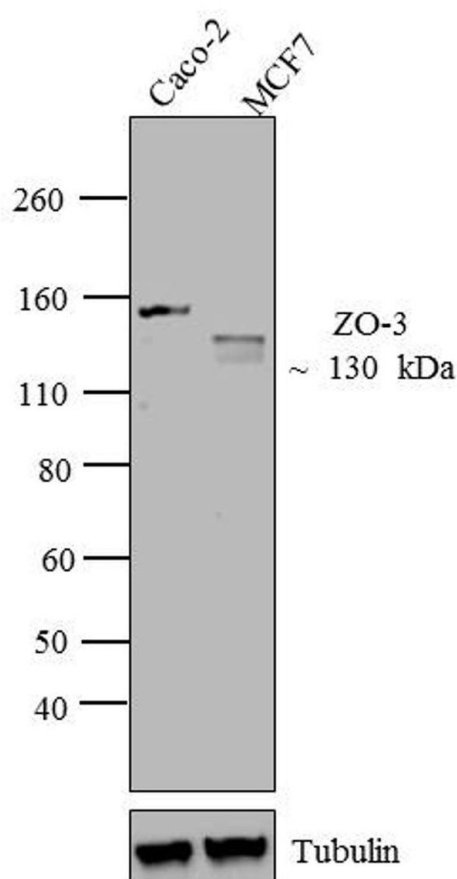
ZO-3 Polyclonal Antibody

Product Details	
Size	100 µg
Species Reactivity	Dog, Human, Mouse, Rat
Published Species	Dog, Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide derived from an internal region of the human ZO-3 protein.
Form	Liquid
Concentration	0.25 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage conditions	-20°C
RRID	AB_2533256

Applications	Tested Dilution	Publications
Western Blot (WB)	1-2 µg/mL	2 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:20-1:200	-
Immunocytochemistry (ICC/IF)	1 µg/mL	3 Publications
ELISA (ELISA)	Assay-dependent	-
Immunoprecipitation (IP)	Assay-dependent	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

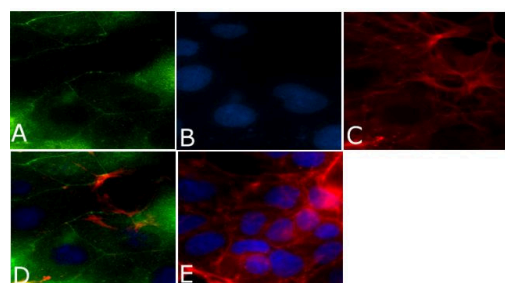
36-4000 was used successfully in the western blot analysis of ZO-3 in MDCK cell lysate.



ZO-3 Antibody (36-4000) in WB

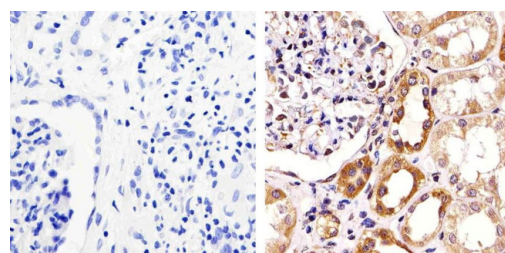
Western blot analysis of ZO-3 was performed by loading 30 µg of Caco-2 (lane1) and MCF7 (lane2) cell lysate using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0322BOX), XCell SureLock™ Electrophoresis System (Product # EI0002), Novex® Sharp Pre-Stained Protein Standard (LC5800), and Pierce™ Power Blotter System (22834). Proteins were transferred to a nitrocellulose membrane and blocked with 5 % skim milk for 1 hour at room temperature. ZO-3 was detected at ~ 130 kDa using ZO-3 Rabbit Polyclonal Antibody (Product # 36-4000) at 1-2 µg/mL in 5 % skim milk at 4°C overnight on a rocking platform on a rocking platform. Goat Anti-Rabbit IgG - HRP Secondary Antibody (G21234) at 1:5000 dilution was used and chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).

ZO-3 Antibody (36-4000) in ICC/IF



Immunofluorescent analysis of ZO-3/TJP3 Antibody was done on 90% confluent log phase CACO2 cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton™ X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with ZO-3/TJP3 Antibody (Product # 36-4000) at 1µg/mL in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488 Goat Anti-Rabbit IgG Secondary Antibody (Product # A-11008) at a dilution of 1:400 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing cell junctional localization. Panel e is a no primary antibody control. The images were captured at 40X magnification.

ZO-3 Antibody (36-4000) in IHC (P)



Immunohistochemistry analysis of ZO-3/TJP3 showing staining in the membrane of paraffin-embedded human kidney tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H₂O₂-methanol for 15 min at room temperature, washed with ddH₂O and PBS, and then probed with a ZO-3/TJP3 polyclonal antibody (Product # 36-4000) diluted in 3% BSA-PBS at a dilution of 1:100 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

7 References

Western Blot (2)

The Prostate

E-cadherin is downregulated in benign prostatic hyperplasia and required for tight junction formation and permeability barrier in the prostatic epithelial cell monolayer.

"36-4000 was used in Western Blotting to indicate that tight junctions are compromised in BPH and loss of E-cadherin is potentially an important underlying mechanism, suggesting targeting E-cadherin loss could be a potential approach to prevent or treat BPH."

Authors: Li F,Pascal LE,Stolz DB,Wang K,Zhou Y,Chen W,Xu Y,Chen Y,Dhir R,Parwani AV,Nelson JB,DeFranco DB,Yoshimura N,Balasubramani GK,Gingrich JR,Maranchie JK,Jacobs BL,Davies BJ,Hrebinko RL,Bigley JD,McBride D,Guo P,He D,Wang Z

Year
2019

Species
Human

Dilution
1:500

Molecular and cellular biology

Delineation of the key aspects in the regulation of epithelial monolayer formation.

Authors: Aschauer L,Gruber LN,Pfaller W,Limonciel A,Athersuch TJ,Cavill R,Khan A,Gstraunthaler G,Grillari J,Grillari R,Hewitt P,Leonard MO,Wilmes A,Jennings P

Year
2013

Species
Human

Dilution
1.25 µg/mL

Immunocytochemistry (3)

Molecular and cellular biology

Delineation of the key aspects in the regulation of epithelial monolayer formation.

Authors: Aschauer L,Gruber LN,Pfaller W,Limonciel A,Athersuch TJ,Cavill R,Khan A,Gstraunthaler G,Grillari J,Grillari R,Hewitt P,Leonard MO,Wilmes A,Jennings P

Year
2013

Species
Human

Dilution
1.25 µg/mL

Chemistry & biology

Family-wide investigation of PDZ domain-mediated protein-protein interactions implicates -catenin in maintaining the integrity of tight junctions.

"Published figure using ZO-3 polyclonal antibody (Product # 36-4000) in Immunofluorescence"

Authors: Gujral TS,Karp ES,Chan M,Chang BH,MacBeath G

Year
2013

Species
Human
Dog

View more ICC/IF references on thermofisher.cn

More applications with references on thermofisher.cn

- IP (1)
- Misc (1)

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.