


Product datasheet

Anti-Plakophilin 3 antibody [EPR5560] ab109441

Recombinant RabMAb

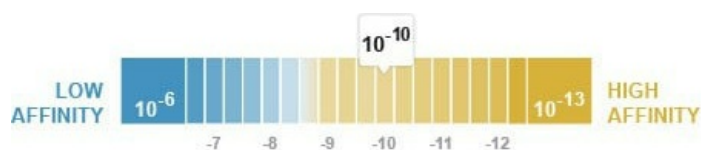
[2 References](#) [6 Images](#)

Overview

Product name	Anti-Plakophilin 3 antibody [EPR5560]
Description	Rabbit monoclonal [EPR5560] to Plakophilin 3
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt, ICC/IF or IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Caco2 and HACAT cell lysates; Human breast and kidney tissues.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <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 For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 1.66 x 10 ⁻¹⁰ M



[Learn more about K_D](#)

Storage buffer pH: 7.20

Preservative: 0.05% Sodium azide
Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant

Purity Protein A purified
Clonality Monoclonal
Clone number EPR5560
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109441 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

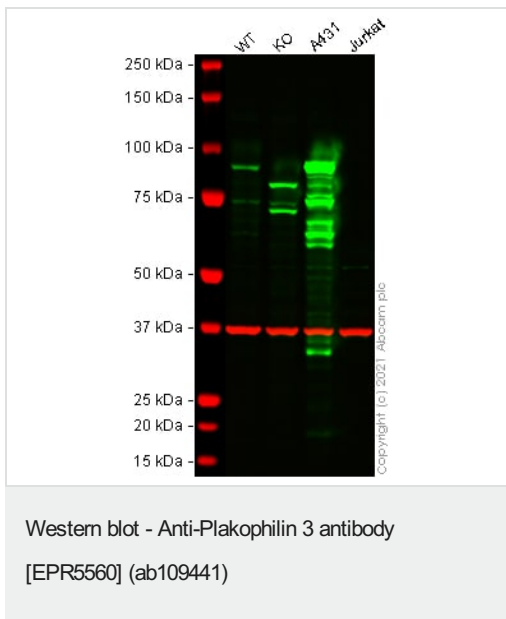
Application	Abreviews	Notes
WB		1/10000 - 1/50000. Detects a band of approximately 87 kDa (predicted molecular weight: 87 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt, ICC/IF or IP.

Target

Function May play a role in junctional plaques.
Tissue specificity Found in desmosomes of most simple and stratified epithelia. Not found in foreskin fibroblasts and various sarcoma-derived cell lines. Beside dendritic reticular cells of lymphatic follicles not found in non-epithelial desmosome-bearing tissues.
Sequence similarities Belongs to the beta-catenin family.
Contains 8 ARM repeats.
Cellular localization Nucleus. Cell junction > desmosome. Nuclear and associated with desmosomes.

Images



All lanes : Anti-Plakophilin 3 antibody [EPR5560] (ab109441) at 1/10000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : PKP3 CRISPR-Cas9 edited HeLa cell lysate

Lane 3 : A431 cell lysate

Lane 4 : Jurkat cell lysate

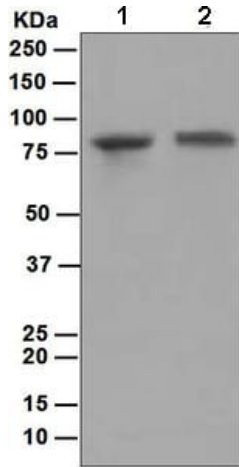
Lysates/proteins at 20 µg per lane.

Predicted band size: 87 kDa

Observed band size: 70, 80 kDa

False colour image of Western blot: Anti-Plakophilin 3 antibody [EPR5560] staining at 1/10000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab109441 was shown to bind specifically to Plakophilin 3. A band was observed at 70 and 80 kDa in wild-type HeLa cell lysates with no signal observed at this size in PKP3 CRISPR-Cas9 edited cell line [ab265539](#) (CRISPR-Cas9 edited cell lysate [ab258120](#)). The band observed in the CRISPR-Cas9 edited lysate lane below 70 and 80 kDa is likely to represent a truncated form of Plakophilin 3. This has not been investigated further and the functional properties of the gene product have not been determined. To generate this image, wild-type and PKP3 CRISPR-Cas9 edited HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L

(IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



Western blot - Anti-Plakophilin 3 antibody [EPR5560] (ab109441)

All lanes : Anti-Plakophilin 3 antibody [EPR5560] (ab109441) at 1/10000 dilution

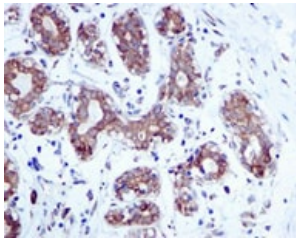
Lane 1 : Caco-2 cell lysate

Lane 2 : HACAT cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 87 kDa

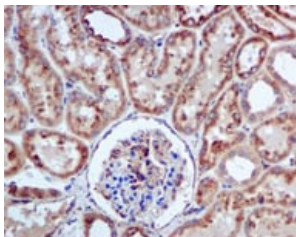
Observed band size: 87 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Plakophilin 3 antibody [EPR5560] (ab109441)

ab109441 at 1/100 dilution staining Human paraffin-embedded breast tissue.

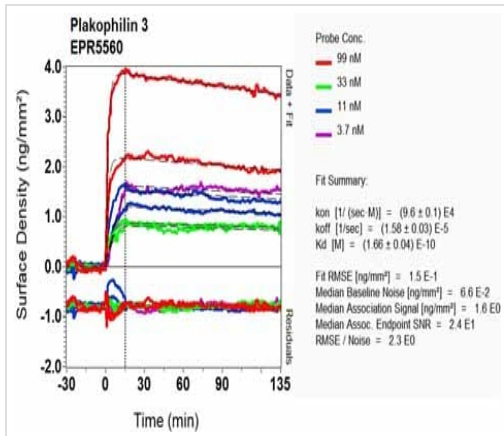
Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Plakophilin 3 antibody [EPR5560] (ab109441)

ab109441 at 1/100 dilution staining paraffin-embedded Human kidney tissue.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



OI-RD Scanning - Anti-Plakophilin 3 antibody
[EPR5560] (ab109441)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

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-Plakophilin 3 antibody [EPR5560] (ab109441)

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

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