


## Product datasheet

# Anti-Plakophilin 3 antibody [EPR5560] - BSA and Azide free ab247865

Recombinant RabMAb

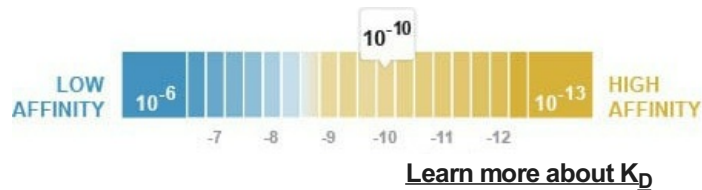
6 Images

### Overview

<b>Product name</b>	Anti-Plakophilin 3 antibody [EPR5560] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR5560] to Plakophilin 3 - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>General notes</b>	<p>ab247865 is the carrier-free version of <a href="#">ab109441</a>.</p> <p>Our <b>carrier-free</b> 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 <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;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<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> 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"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Dissociation constant (K<sub>D</sub>)</b>	K <sub>D</sub> = 1.66 x 10 <sup>-10</sup> M



<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR5560
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab247865 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

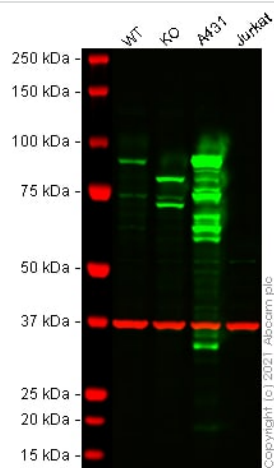
Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 87 kDa (predicted molecular weight: 87 kDa).

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

## Target

<b>Function</b>	May play a role in junctional plaques.
<b>Tissue specificity</b>	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.
<b>Sequence similarities</b>	Belongs to the beta-catenin family. Contains 8 ARM repeats.
<b>Cellular localization</b>	Nucleus. Cell junction > desmosome. Nuclear and associated with desmosomes.

## Images



Western blot - Anti-Plakophilin 3 antibody  
[EPR5560] - BSA and Azide free (ab247865)

**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

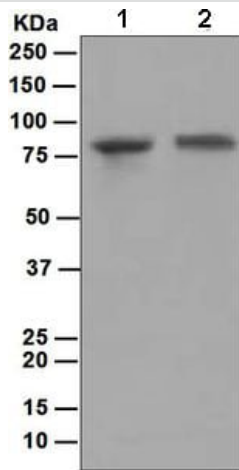
Lysates/proteins at 20 µg per lane.

**Predicted band size:** 87 kDa

**Observed band size:** 70, 80 kDa

This data was developed using **ab109441**, the same antibody clone in a different buffer formulation.

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



Western blot - Anti-Plakophilin 3 antibody [EPR5560] - BSA and Azide free (ab247865)

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

**Lane 1 :** Caco-2 cell lysate

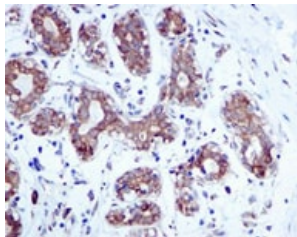
**Lane 2 :** HACAT cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 87 kDa

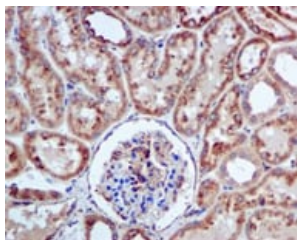
**Observed band size:** 87 kDa

This data was developed using [ab109441](#), the same antibody clone in a different buffer formulation.



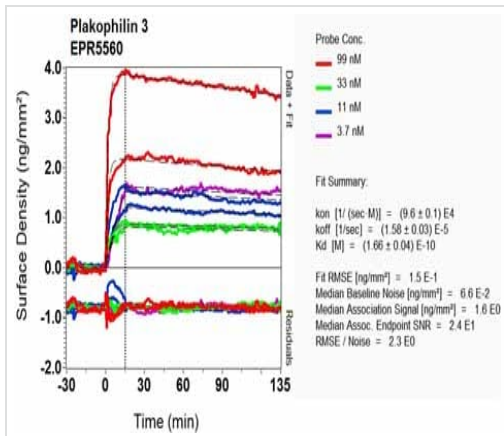
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Plakophilin 3 antibody [EPR5560] - BSA and Azide free (ab247865)

This data was developed using [ab109441](#), the same antibody clone in a different buffer formulation. [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] - BSA and Azide free (ab247865)

This data was developed using [ab109441](#), the same antibody clone in a different buffer formulation. [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] - BSA and Azide free (ab247865)

This data was developed using [ab109441](#), the same antibody clone in a different buffer formulation. 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] - BSA and Azide free (ab247865)

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

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