abcam

ab109442

Anti-p60 CAF1/MPP7 antibody [EPR6105]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR6105
Purification technique	Affinity purification Protein A
Concentration	0.103 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/250 - 1/500
Notes	-

Not recommended

Species	Mouse
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	-

Not recommended

Species	Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/10000 - 1/50000
Notes	-

Not recommended

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/100 - 1/1000
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Mouse
Dilution info	-
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information CHAF1B

Function	Acts as a component of the histone chaperone complex chromatin assembly factor 1 (CAF-1), which assembles histone octamers onto DNA during replication and repair. CAF-1 performs the first step of the nucleosome assembly process, bringing newly synthesized histones H3 and H4 to replicating DNA; histones H2A/H2B can bind to this chromatin precursor subsequent to DNA replication to complete the histone octamer.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Stable for 12 months at -20°C

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Species reactivity
Rat: We have preliminary internal testing data to indicate this antibody may not react with this species.
Please contact us for more information.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The target p60 CAF1/MPP7 also known simply as MPP7 is a protein involved in cellular mechanisms regarding chromatin assembly. It has a mass of approximately 55 kDa. Expression of MPP7 occurs predominantly in the cytoplasm and nucleus. Its function involves association with chromatin assembly factor 1 (CAF-1) complex hence the name p60 CAF1 highlighting its role in DNA replication and repair processes.
Biological function summary	In cellular environments MPP7 is significant in maintaining cell polarity and epithelial cell junctions. It plays an important part in forming the Crumbs-3 (CRB3) complex an essential component regulating epithelial cell polarity. Through this complex MPP7 collaborates closely with PATJ (Pals1-associated tight junction protein) and DLG1 (Discs Large Homolog 1) contributing to cell junction stability and signal transduction pathways that regulate epithelial integrity.
Pathways	MPP7 is integral to epithelial cell polarity pathways and cell adhesion signaling. It affects pathway activities by coordinating with proteins like DLG1 and PATJ. By aligning with the CRB3 complex MPP7 influences processes within the Hippo signaling pathway a pathway that controls cell proliferation and apoptosis. This positions MPP7 as a mediator balancing cell growth and communication in complex signaling networks.
Associated diseases and disorders	MPP7 links to cancer progression and epithelial tissue-related conditions. Due to its role in maintaining cell polarity and structure alterations or disruptions in MPP7 functions could contribute to tumorigenesis. This connection emerges through interactions with PATJ and DLG1 impacting the integrity of epithelial junctions also potentially influencing conditions like Inflammatory Bowel Disease (IBD) where epithelial barrier function is important. Research continues to elucidate the exact mechanisms opening paths for therapeutic targeting in these diseases.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

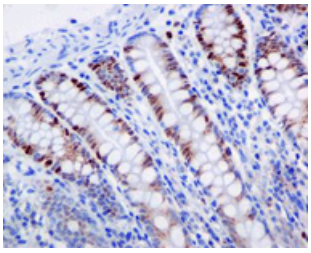
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

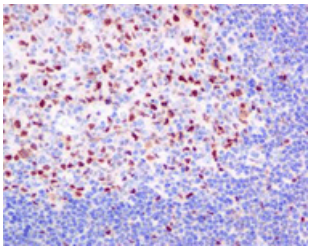
5 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p60 CAF1/MPP7 antibody [EPR6105] (ab109442)

P60 CAF1/MPP7 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-p60 CAF1/MPP7 antibody

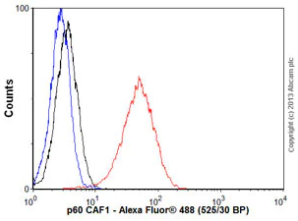
ab109442 at 1/250 dilution staining p60 CAF1/MPP7 in paraffin-embedded Human colon tissue. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p60 CAF1/MPP7 antibody [EPR6105] (ab109442)

P60 CAF1/MPP7 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-p60 CAF1/MPP7 antibody

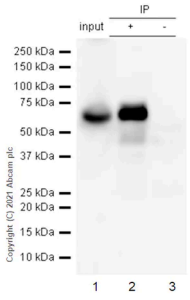
ab109442 at 1/250 dilution staining p60 CAF1/MPP7 in paraffin-embedded Human tonsil tissue. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-p60 CAF1/MPP7 antibody [EPR6105] (ab109442)

P60 CAF1/MPP7 Flow Cytometry (Intracellular) staining using rabbit Anti-p60 CAF1/MPP7 antibody

Overlay histogram showing HeLa cells stained with ab109442 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab109442 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Immunoprecipitation - Anti-p60 CAF1/MPP7 antibody [EPR6105] (ab109442)

p60 CAF1/MPP7 was immunoprecipitated from 0.35 mg HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 µg with 109442 at 1/50 dilution (2µg). VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 µg

Lane 2: ab109442 IP in HeLa whole cell lysate

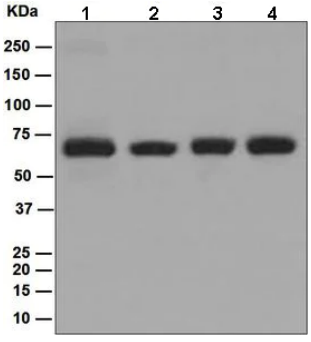
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab109442 in HeLa whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

All lanes:
Immunoprecipitation - Anti-p60 CAF1/MPP7 antibody [EPR6105] (ab109442)

Predicted band size: 61 kDa

Observed band size: 70 kDa



Western blot - Anti-p60 CAF1/MPP7 antibody [EPR6105] (ab109442)

P60 CAF1/MPP7 Western blot staining using rabbit Anti-p60 CAF1/MPP7 antibody

All lanes:
Western blot - Anti-p60 CAF1/MPP7 antibody [EPR6105] (ab109442)

Lane 1:
Jurkat cell lysate at 10 µg

Lane 2:
HeLa cell lysate at 10 µg

Lane 3:
293T cell lysate at 10 µg

Lane 4:
Caco-2 cell lysate at 10 µg

Predicted band size: 61 kDa

Observed band size: 70 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.