abcam

**ab181158**

# Anti-PCQAP / MED15 antibody [EPR13309]

Recombinant | RabMAb

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | 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** | EPR13309 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 0.321 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

### WB

#### Tested

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | 1/1000 - 1/2000 |
| **Notes** | - |

| | |
|---|---|
| **Species** | Rat |

| | |
|---|---|
| **Dilution info** | 1/1000 - 1/2000 |
| **Notes** | - |

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/1000 - 1/2000 |
| **Notes** | - |

## ICC/IF

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/50 - 1/100 |
| **Notes** | - |

### Expected

| | |
|---|---|
| **Species** | Mouse, Rat |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/30 |
| **Notes** | For unpurified use at 1/50. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. |

### Expected

| | |
|---|---|
| **Species** | Mouse, Rat |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## IHC-P

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/100 - 1/250 |
| **Notes** | - |

### Not recommended

| | |
|---|---|
| **Species** | Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## Target data

See full target information MED15

**Function** Component of the Mediator complex, a coactivator involved in the regulated transcription of nearly all RNA polymerase II-dependent genes. Mediator functions as a bridge to convey information from gene-specific regulatory proteins to the basal RNA polymerase II transcription machinery. Mediator is recruited to promoters by direct interactions with regulatory proteins and serves as a scaffold for the assembly of a functional preinitiation complex with RNA polymerase II and the general transcription factors. Required for cholesterol-dependent gene regulation. Positively regulates the Nodal signaling pathway.

## Storage

| | |
|---|---|
| **Shipped at conditions** | Conditional Ambient |
| **Appropriate short-term storage duration** | 1-2 weeks |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | -20°C |
| **Aliquoting information** | Upon delivery aliquot |
| **Storage information** | Avoid freeze / thaw cycle |

## 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.

## Supplementary info

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

| | |
|---|---|
| **Activity summary** | PCQAP also known as MED15 is a subunit of the Mediator complex an essential coactivator for transcription. MED15 helps facilitate the transcription process in eukaryotic cells by bridging transcription factors and RNA polymerase II. Its molecular mass is approximately 100 kDa. The protein is expressed widely in various tissues suggesting it has multiple roles in cellular processes. |
| **Biological function summary** | PCQAP/MED15 is important in regulating gene expression. It forms part of the large Mediator complex which interacts with various transcription factors to initiate and control chromosomal transcription. This interaction aids in the precise regulation of gene expression necessary for cell differentiation and development. Its function is quite important in the transcription machinery within the cell nucleus. |
| **Pathways** | PCQAP/MED15 integrates into the signal transduction and gene expression pathways. It has an involvement in the Wnt signaling pathway a system essential for embryonic development and cell growth. MED15 acts in conjunction with other proteins such as β-catenin which transduces the Wnt signal to the nucleus where MED15 participates in the transcriptional regulation of target genes. |
| **Associated diseases and disorders** | PCQAP/MED15 has connections to cancer and certain neurological disorders. Its misregulation or mutation can lead to transcriptional dysregulation contributing to the onset of cancers by affecting genes that control cell proliferation. In neurological disorders PCQAP/MED15 impacts the expression of genes involved in neural functions with possible ties to disorders like Huntington's disease. The protein interacts with p53 a well-known tumor suppressor protein highlighting its role in disease development and progression. |

## 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.

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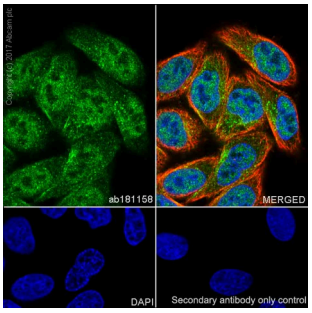
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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## 9 product images

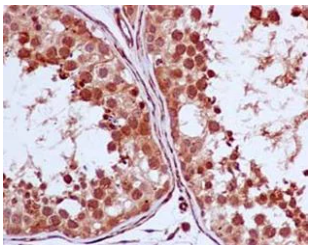



### Immunocytochemistry/ Immunofluorescence - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158)

PCQAP / MED15 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PCQAP / MED15 antibody

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling PCQAP/MED15 with Purified ab181158 at 1:100 dilution (3.2µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). ab150077 Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

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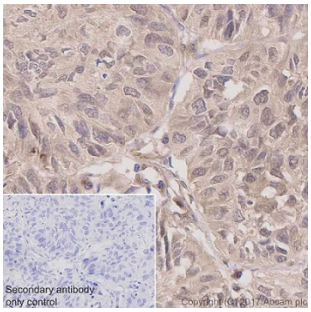


### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158)

PCQAP / MED15 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PCQAP / MED15 antibody

Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling PCQAP / MED15 with unpurified ab181158 at 1/250 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counterstained with Hematoxylin.

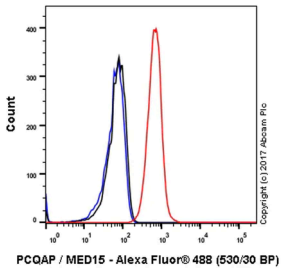
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## Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158)

PCQAP / MED15 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PCQAP / MED15 antibody

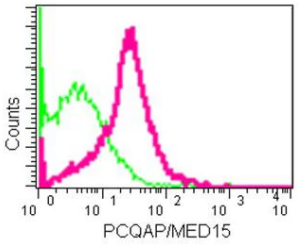
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung carcinoma tissue sections labeling PCQAP/MED15 with purified ab181158 at 1:250 dilution (1.28 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer pH9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.




## Flow Cytometry (Intracellular) - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158)

PCQAP / MED15 Flow Cytometry (Intracellular) staining using rabbit Anti-PCQAP / MED15 antibody

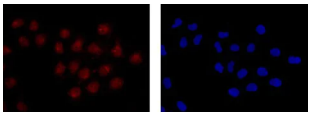
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling PCQAP/MED15 with purified ab181158 at 1/30 dilution (10 ug/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - 90% methanol. Unlabeled control - Rabbit monoclonal IgG (Black). Cell without incubation with primary antibody and secondary antibody (Blue).




## Flow Cytometry (Intracellular) - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158)

PCQAP / MED15 Flow Cytometry (Intracellular) staining using rabbit Anti-PCQAP / MED15 antibody

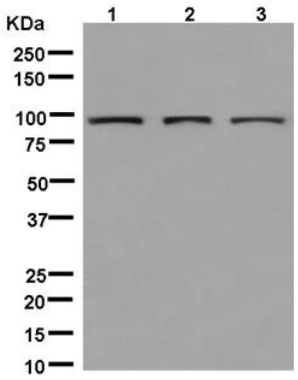
Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed293 cells labeling PCQAP / MED15 with unpurified ab181158at 1/50 dilution (red), compared to aRabbit monoclonal IgG isotype control (green), followed by Goat anti rabbit IgG (FITC) secondary at 1/150 dilution.



## Immunocytochemistry/ Immunofluorescence - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158)

PCQAP / MED15 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PCQAP / MED15 antibody

Immunofluorescent analysis of acetone-fixed HeLa cells labeling PCQAP / MED15 with unpurified ab181158 at 1/100 dilution followed by Goat anti rabbit IgG (Alexa Fluor® 555) secondary antibody at 1/200 diution. Counter stained with Dapi (blue).




## Western blot - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158)

PCQAP / MED15 Western blot staining using rabbit Anti-PCQAP / MED15 antibody

All lanes:
Western blot - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158) at 1/1000 dilution

Lane 1:
293 cell lysate at 20 µg

Lane 2:
K562 cell lysate at 20 µg

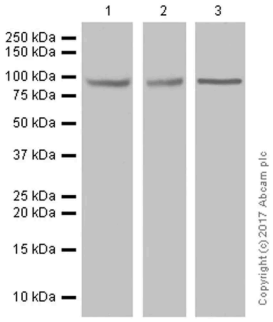
Lane 3:
HeLa cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 87 kDa

Observed band size: 97 kDa




## Western blot - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158)

PCQAP / MED15 Western blot staining using rabbit Anti-PCQAP / MED15 antibody

Blocking and diluting buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158) at 1/1000 dilution

Lane 1:
293 (Human embryonic kidney epithelial cell) whole cell lysates at 20 µg

Lane 2:
K562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysates at 20 µg

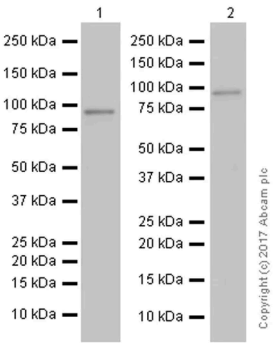
Lane 3:
C6 (Rat glial tumor glial cell) whole cell lysates at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 87 kDa

Observed band size: 97 kDa




# Western blot - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158)

PCQAP / MED15 Western blot staining using rabbit Anti-PCQAP / MED15 antibody

Blocking and diluting buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-PCQAP / MED15 antibody [EPR13309] (ab181158) at 1/1000 dilution

Lane 1:
Mouse placenta lysates at 15 µg

Lane 2:
Mouse spleen lysates at 15 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 87 kDa

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