abcam

# ab199424

# Anti-c-Maf antibody [EPR16484]

Recombinant | RabMAb | 20ul selling size

## 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** | EPR16484 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 0.5 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## ICC/IF

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

### Predicted

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

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

### Predicted

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

## IHC-P

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/500 |
| **Notes** | - |

### Predicted

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

# Target data

See full target information MAF

| | |
|---|---|
| **Function** | Acts as a transcriptional activator or repressor. Involved in embryonic lens fiber cell development. Recruits the transcriptional coactivators CREBBP and/or EP300 to crystallin promoters leading to up-regulation of crystallin gene during lens fiber cell differentiation. Activates the expression of IL4 in T helper 2 (Th2) cells. Increases T-cell susceptibility to apoptosis by interacting with MYB and decreasing BCL2 expression. Together with PAX6, transactivates strongly the glucagon gene promoter through the G1 element. Activates transcription of the CD13 proximal promoter in endothelial cells. Represses transcription of the CD13 promoter in early stages of myelopoiesis by affecting the ETS1 and MYB cooperative interaction. Involved in the initial chondrocyte terminal differentiation and the disappearance of hypertrophic chondrocytes during endochondral bone development. Binds to the sequence 5'-[GT]G[GC]N[GT]NCTCAGNN-3' in the L7 promoter. Binds to the T-MARE (Maf response element) sites of lens-specific alpha- and beta-crystallin gene promoters. Binds element G1 on the glucagon promoter. Binds an AT-rich region adjacent to the TGC motif (atypical Maf response element) in the CD13 proximal promoter in endothelial cells (By similarity). When overexpressed, represses anti-oxidant response element (ARE)-mediated transcription. Involved either as an oncogene or as a tumor suppressor, depending on the cell context. Binds to the ARE sites of detoxifying enzyme gene promoters. |

## 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** | The c-Maf protein also known as Maf or MAF is a member of the large MAF family of basic leucine zipper (bZIP) transcription factors. This protein plays a significant role in the regulation of gene expression. It has a molecular weight of approximately 38 kDa. c-Maf is commonly expressed in various tissues such as the lens of the eye the kidneys and specific immune cells including T cells and macrophages. It is widely studied due to its involvement in transcriptional activation of certain target genes. |
| **Biological function summary** | C-Maf protein influences cellular differentiation and function particularly in immune cells. It forms part of a transcriptional complex that regulates genes critical for the production of interleukins and other cytokines. In the immune system c-Maf is essential for the differentiation of T-helper 2 cells and influences the production of cytokines such as IL-4. Additionally it is involved in the maturation of lens fibers in the eye and modulation of renal functions. |
| **Pathways** | C-Maf plays an important role in the immune and visual system. It is part of the signaling pathways that regulate Th2 cytokine genes including IL-4 within the adaptive immune response. This process involves interaction with other transcription factors such as STAT6 and GATA3. Moreover the lens development pathway also includes c-Maf where it works with proteins like CRYAA to maintain lens transparency and function. |
| **Associated diseases and disorders** | C-Maf has been linked to multiple myeloma and juvenile idiopathic arthritis. c-Maf is often upregulated in multiple myeloma a cancer of plasma cells where it influences proliferation and survival of the malignant cells through its target genes like cyclin D2. Furthermore in juvenile idiopathic arthritis c-Maf contributes to the dysregulation of inflammatory cytokines indirectly involving proteins like IL-10 and IL-21. Understanding c-Maf's function aids in exploring therapeutic targets for 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.

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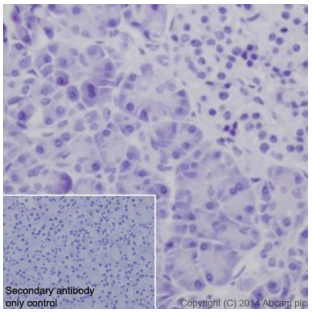
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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## 4 product images



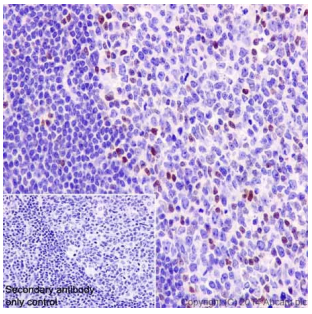

### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Maf antibody [EPR16484] (ab199424)

C-Maf Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-c-Maf antibody

Immunohistochemical analysis of paraffin-embedded Human pancreas tissue using ab199424 at 1/500 followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500. No staining on Human pancreas tissue is observed (Subcellular location: Nucleus [UniProt]). Counter stained with Hematoxylin. Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

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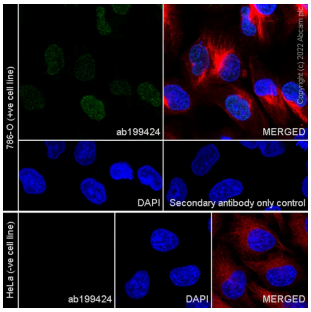



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C-Maf Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-c-Maf antibody

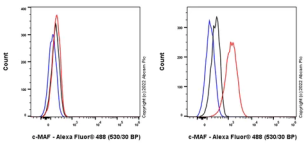
Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling c-Maf with ab199424 at 1/500 followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500. Nucleus staining on epithelial on Human tonsil tissue is observed (Subcellular location: Nucleus [UniProt]). Counter stained with Hematoxylin. Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

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## Immunocytochemistry/ Immunofluorescence - Anti-c-Maf antibody [EPR16484] (ab199424)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized 786-O (human kidney epithelial cell) cells labelling c-Maf with ab199424 at 1/50 dilution (10.34 µg/ml) followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed secondary antibody used at 1/1000 dilution (2µg/ml) (Green). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5µg/ml)(Red). The Nuclear counterstain was DAPI (Blue). Confocal image showing nuclear staining in 786-O cell line Negative control: HeLa (PMID: 28933784)



## Flow Cytometry (Intracellular) - Anti-c-Maf antibody [EPR16484] (ab199424)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa (human cervical adenocarcinoma epithelial cell, Left) / 786-O (human kidney epithelial cell, Right) cells labelling c-Maf with ab199424 at 1/50 dilution (1 ug)/Red compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody. Negative control: HeLa (PMID: 28933784)

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