abcam

ab219213

Anti-c-Maf antibody [EPR16484] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR16484
Purification technique	Affinity purification Protein A
Concentration	0.993 mg/mL The concentration of this product may be batch-dependent 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	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab219213 is the carrier-free version of ab199424.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. 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.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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.

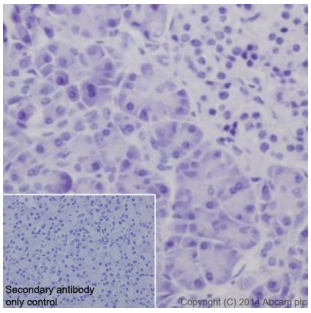
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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

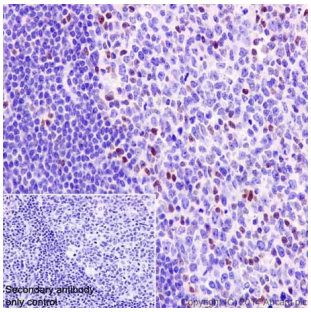


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Maf antibody [EPR16484] - BSA and Azide free (ab219213)

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

This IHC data was generated using the same anti-c Maf antibody clone, EPR16484, in a different buffer formulation (cat# ab199424).
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.
Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Maf antibody [EPR16484] - BSA and Azide free (ab219213)

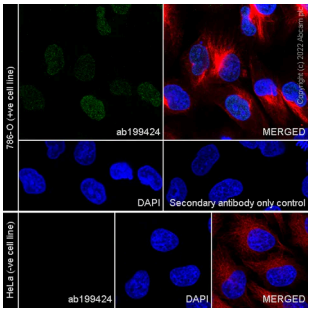
C-Maf Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-c-Maf antibody

This IHC data was generated using the same anti-c Maf antibody clone, EPR16484, in a different buffer formulation (cat# ab199424).

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.

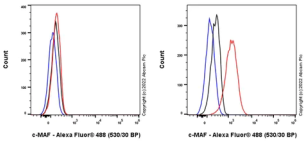
Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-c-Maf antibody [EPR16484] - BSA and Azide free (ab219213)

This data was generated using ab199424 the same antibody clone in a different buffer formulation. 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] - BSA and Azide free (ab219213)

This data was generated using ab199424 the same antibody clone in a different buffer formulation. 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)

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