

c-Maf Rabbit pAb

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Catalog # AP52050

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O75444
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38492
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human c-Maf
Epitope Specificity	341-403/403
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
DISEASE	Note=A chromosomal aberration involving MAF is found in some forms of multiple myeloma (MM). Translocation t(14;16)(q32.3;q23) with an IgH locus. Defects in MAF are the cause of cataract pulverulent juvenile-onset MAF-related (CAPJOM) [MIM:610202]. A form of cataract with nuclear or cortical pulverulent opacities. Pulverulent cataracts are characterized by a dust-like, 'pulverised' appearance of the opacities which can be found in any part of the lens. The phenotype shows significant intra- and interfamilial variation, both in the distribution of the cataract and the degree of opacification. Some patients with cataract pulverulent juvenile-onset can present microcornea and bilateral iris colobomas in addition to cataract. Defects in MAF are the cause of cataract congenital cerulean type 4 (CCA4) [MIM:610202]. A cerulean form of congenital cataract. Cerulean cataracts are characterized by peripheral bluish and white opacifications organized in concentric layers with occasional central lesions arranged radially. The opacities are observed in the superficial layers of the fetal nucleus as well as the adult nucleus of the lens. Involvement is usually bilateral. Visual acuity is only mildly reduced in childhood. In adulthood, the opacifications may progress, making lens extraction necessary. Histologically the lesions are described as fusiform cavities between lens fibers which contain a deeply staining granular material. Although the lesions may take on various colors, a dull blue is the most common appearance and is responsible for the designation cerulean cataract.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is a DNA-binding, leucine zipper-containing transcription factor that acts as a homodimer or as a heterodimer. Depending on the binding site and binding partner, the encoded protein can be a transcriptional activator or repressor. This protein plays a role in the regulation of several cellular processes, including embryonic lens fiber cell development, increased T-cell susceptibility to apoptosis, and chondrocyte

terminal differentiation. Defects in this gene are a cause of juvenile-onset pulverulent cataract as well as congenital cerulean cataract 4 (CCA4). Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2010].

Additional Information

Gene ID	4094
Other Names	Transcription factor Maf, Proto-oncogene c-Maf, V-maf musculoaponeurotic fibrosarcoma oncogene homolog, MAF
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	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.
Cellular Location	Nucleus {ECO:0000255 PROSITE-ProRule:PRU00978}.
Tissue Location	Expressed in endothelial cells.

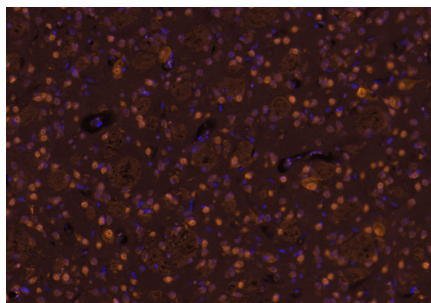
Background

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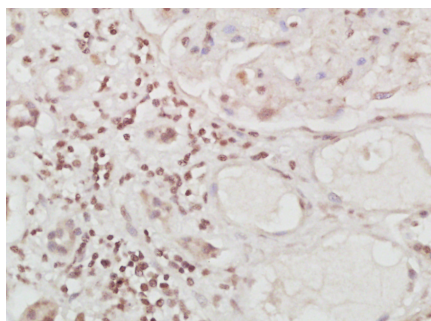
References

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Martin J.,et al.Nature 432:988-994(2004).
Dhakshinamoorthy S.,et al.Oncogene 21:5301-5312(2002).
Hurt E.M.,et al.Cancer Cell 5:191-199(2004).
Watson J.E.,et al.Oncogene 23:3487-3494(2004).

Images



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (c-Maf) Polyclonal Antibody, Unconjugated (AP52050) at 1:200 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (AP52050- cy3) for 90 minutes, and DAPI for nuclei staining.



Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (c-Maf) Polyclonal Antibody, Unconjugated (AP52050) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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