

Product datasheet

Recombinant Human c-Maf protein ab114469

1 Image

Overview

Product name	Recombinant Human c-Maf protein
Protein length	Protein fragment

Description

Nature	Recombinant
Source	Wheat germ
Amino Acid Sequence	
Accession	O75444-1
Species	Human
Sequence	SCRFKRVQQRHVLESEKNQLLQQVDHLKQEISRLVRERDAYKEKEYEKLVS SGFRENGSSSDNPSSPEFFITEPTRKLEPSVGYATFWKPQHRVLTSVFTK
Molecular weight	37 kDa including tags
Amino acids	304 to 403

Specifications

Our [Abpromise guarantee](#) covers the use of **ab114469** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE ELISA Western blot
Form	Liquid
Additional notes	Protein concentration is above or equal to 0.05 mg/ml. ab114469 is best used within three months from the date of receipt.

Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00
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General Info

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.

Tissue specificity

Expressed in endothelial cells.

Involvement in 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.

Sequence similarities

Belongs to the bZIP family. Maf subfamily.
Contains 1 bZIP domain.

Post-translational modifications

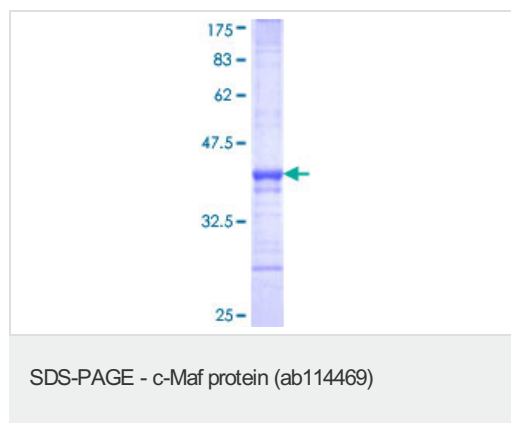
Ubiquitinated, leading to its degradation by the proteasome. Ubiquitination is triggered by glucocorticoids.

Phosphorylated by GSK3 and MAPK13 on serine and threonine residues (Probable). The phosphorylation status can serve to either stimulate or inhibit transcription.

Cellular localization

Nucleus.

Images



ab114469 analysed on a 12.5% SDS-PAGE
stained with Coomassie Blue.

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