

Anti-MAF1 Antibody

Rabbit polyclonal antibody to MAF1 Catalog # AP60336

Product Information

Application WB, IHC
Primary Accession Q9H063
Other Accession Q9D0U6

Reactivity Human, Mouse, Rat, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 28771

Additional Information

Gene ID 84232

Other Names Repressor of RNA polymerase III transcription MAF1 homolog

Target/Specificity Recognizes endogenous levels of MAF1 protein.

Dilution WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC

(1/100 - 1/200)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name MAF1

Function Plays a role in the repression of RNA polymerase III-mediated transcription

in response to changing nutritional, environmental and cellular stress conditions to balance the production of highly abundant tRNAs, 5S rRNA, and

other small non-coding RNAs with cell growth and maintenance (PubMed: 18377933, PubMed: 20233713, PubMed: 20516213,

PubMed: 20543138). Also plays a key role in cell fate determination by promoting mesorderm induction and adipocyte differentiation (By similarity). Mechanistically, associates with the RNA polymerase III clamp and thereby impairs its recruitment to the complex made of the promoter DNA, TBP and the initiation factor TFIIIB (PubMed: 17505538, PubMed: 20887893). When

nutrients are available and mTOR kinase is active, MAF1 is

hyperphosphorylated and RNA polymerase III is engaged in transcription. Stress-induced MAF1 dephosphorylation results in nuclear localization, increased targeting of gene-bound RNA polymerase III and a decrease in the transcriptional readout (PubMed:<u>26941251</u>). Additionally, may also regulate RNA polymerase I and RNA polymerase II- dependent transcription through its ability to regulate expression of the central initiation factor TBP (PubMed:<u>17499043</u>).

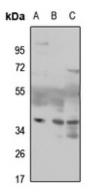
Cellular Location

Nucleus. Cytoplasm

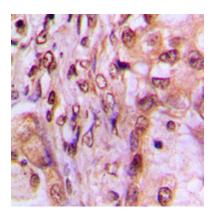
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human MAF1. The exact sequence is proprietary.

Images



Western blot analysis of MAF1 expression in HEK293T (A), Hela (B), mouse kidney (C) whole cell lysates.



Immunohistochemical analysis of MAF1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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