

### **Anti-MAF1 Antibody**

Rabbit polyclonal antibody to MAF1 Catalog # AP60336

# **Specification**

## **Anti-MAF1 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Calculated MW

WB, IHC

O9H063
O9D0U6
Human, Mouse, Rat, Bovine
Rabbit
Polyclonal
28771

# **Anti-MAF1 Antibody - Additional Information**

# **Gene ID 84232**

#### **Other Names**

Repressor of RNA polymerase III transcription MAF1 homolog

## Target/Specificity

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

#### Dilution

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

#### **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

## **Anti-MAF1 Antibody - 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:<a href="http://www.uniprot.org/citations/18377933" target="\_blank">18377933</a>, PubMed:<a href="http://www.uniprot.org/citations/20233713" target="\_blank">20233713</a>, PubMed:<a href="http://www.uniprot.org/citations/20516213" target="\_blank">20516213</a>, PubMed:<a href="http://www.uniprot.org/citations/20543138" target="\_blank">20543138</a>).



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:<a href="http://www.uniprot.org/citations/17505538" target="\_blank">17505538</a>, PubMed:<a href="http://www.uniprot.org/citations/20887893" target="\_blank">20887893</a>). 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:<a href="http://www.uniprot.org/citations/26941251" target="\_blank">26941251</a>/a>). 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:<a href="http://www.uniprot.org/citations/17499043" target="\_blank">17499043</a>/a>).

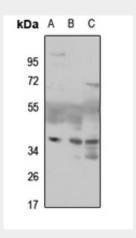
**Cellular Location** Nucleus. Cytoplasm

## **Anti-MAF1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

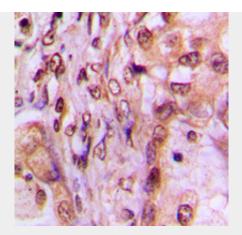
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Anti-MAF1 Antibody - 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.

# **Anti-MAF1 Antibody - Background**

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