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MAF1 Rabbit pAb

Catalog # AP99274

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9H063
Other Accession	Q9H063
Predicted	Rat, Pig, Human, Mouse, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28771
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MAF1
Epitope Specificity	1-100/256
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the MAF1 family.
Post-translational modifications	Phosphorylated at Ser-60, Ser-68 and Ser-75; the major sites of phosphorylation. Nuclear accumulation correlates with a concomitant dephosphorylation. Phosphorylation may attenuate its RNA polymerase III-repressive function.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a protein that is similar to Maf1, a Saccharomyces cerevisiae protein highly conserved in eukaryotic cells. Yeast Maf1 is a negative effector of RNA polymerase III (Pol III). It responds to changes in the cellular environment and represses pol III transcription. Biochemical studies identified the initiation factor TFIIIB as a target for Maf1-dependent repression. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	84232
Other Names	1110068E11Rik; MAF1_HUMAN; MAF1; MAF1_MOUSE; MAF1_RAT; MAF1 negative regulator of RNA polymerase III; MAF1 homolog, negative regulator of RNA polymerase III; MAF1 homolog (S. cerevisiae)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	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:26941251). 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:17499043).
Cellular Location	Nucleus. Cytoplasm

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