

MAF1 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP10204c**Specification**

MAF1 Antibody (Center) Blocking peptide - Product Information

Primary Accession [O9H063](#)
Other Accession [NP_115648.2](#)

MAF1 Antibody (Center) Blocking peptide - Additional Information

Gene ID 84232

Other Names

Repressor of RNA polymerase III transcription MAF1 homolog, MAF1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MAF1 Antibody (Center) Blocking peptide - 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](http://www.uniprot.org/citations/18377933), PubMed: [20233713](http://www.uniprot.org/citations/20233713), PubMed: [20516213](http://www.uniprot.org/citations/20516213), PubMed: [20543138](http://www.uniprot.org/citations/20543138)). Also plays a key role in cell fate determination by promoting mesoderm 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: [20887893](http://www.uniprot.org/citations/20887893), PubMed: [17505538](http://www.uniprot.org/citations/17505538)). 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](http://www.uniprot.org/citations/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

MAF1 Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

MAF1 Antibody (Center) Blocking peptide - Images**MAF1 Antibody (Center) Blocking peptide - Background**

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.

MAF1 Antibody (Center) Blocking peptide - References

Kantidakis, T., et al. Proc. Natl. Acad. Sci. U.S.A. 107(26):11823-11828(2010) Shor, B., et al. J. Biol. Chem. 285(20):15380-15392(2010) Johnson, S.S., et al. Mol. Cell 26(3):367-379(2007) Lamesch, P., et al. Genomics 89(3):307-315(2007) Rollins, J., et al. Int. J. Biol. Sci. 3(5):292-302(2007)