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ProductInformation

Anti-MAFF (N-Teminal)
produced in rabbit, IgG fraction of antiserum

Catalog Number **M8569**

Product Description

Anti-MAFF (N-terminal) is developed in rabbit using a synthetic peptide corresponding to amino acids 2-17 of human MAFF, conjugated to KLH via a C-terminal added cysteine residue, as immunogen. The mouse and rat sequences differ from the human immunizing sequence in one and two amino acids, respectively. Seven amino acids are identical in MaFG in the C-terminal region of the peptide. Whole antiserum is fractionated and then further purified by ion-exchange chromatography to provide the IgG fraction of antiserum that is essentially free of other rabbit serum proteins.

Anti-MAFF (N-terminal) specifically recognizes MAFF. Applications include immunoblotting (18 kDa) and immunoprecipitation. Staining of the MAFF band in immunoblotting is specifically inhibited by the immunizing peptide.

The *maf* oncogene was identified by structural analysis of the AS42 avian transforming retrovirus genome.[1] The Maf family is divided into two subclasses, large Mafs (vMaf, cMaf, MafB and Nrl) and small Mafs (MafF, MafK, and MafG).[2, 3] Both subclasses contain leucine-zipper motifs, which allow homodimerization as well as heterodimerization with a variety of other bZip transcription factors.[4] Large Mafs also contain an acidic transactivation domain absent in the small Maf proteins. Although they do not possess inherent transactivation activity, small Maf proteins can act as positive regulators of transcription by targeting transcriptionally active dimerization partners to specific DNA regulatory elements. Conversely, small Mafs can act also as negative regulators of transcription by recruiting transcriptional repressors or by forming homodimers that can replace active dimers.[4, 5] Human MafF was isolated in a yeast one-hybrid system from a human myometrium cDNA library.[6] Human MAFF encodes a 164 amino acids proten. Like other small MAFF proteins, it contains an extended leucine zipper structure and lacks an N-terminal transactivating domain.[7] The three small Maf proteins have been implicated in a number of physiological processes, including development, differentiation, haematopoiesis and stress response. Interestingly, these three proteins regulate the stress response via different mechanisms.[5]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working dilution of 1:4,000-1:8,000 is recommended using whole extracts of the A431 cell line..

Immunoprecipitation: 4-8 µL immunoprecipitates MAFF from the A431 cell line.

Recommendation: For immunoblotting, dilute the antibody in PBS containing 5.0% non-fat dry milk and 0.05 % Tween® 20.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

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5. Moran, J.A., et al., *Biochem. J*., **361**, 371-377 (2002).
6. Inoue, T., et al., *J. Biol. Chem*., **269**, 32451-32456 (1994).
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