Recombinant MAF protein (His tag)

Catalog Number	546543
Synonyms	Proto-oncogene c-Maf; V-maf musculoaponeurotic fibrosarcoma oncogene homolog
Species	Human
Expression System	E. coli
Accession	O75444
Molecular Weight	Predictes a molecular mass of 15.40 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	259-373
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 259-373 aa (O75444) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This recombinant protein product features a 115-amino acid fragment (residues 259-373) of the human Transcription factor Maf (Proto-oncogene c-Maf), encompassing the complete bZIP functional domain. It serves as a specialized tool for investigating the DNA-binding and dimerization mechanisms central to Maf's roles in transcriptional regulation, cellular differentiation, and oncogenesis. Transcription factor Maf (encoded by the MAF gene) functions as a key transcriptional activator or repressor with diverse biological roles. It is critically involved in embryonic lens fiber cell development by recruiting coactivators like CREBBP and EP300 to upregulate crystallin genes. In immune regulation, it activates IL4 expression in Th2 cells and modulates T-cell apoptosis through interactions with MYB, affecting BCL2 levels. The protein also participates in glucagon gene transactivation with PAX6, regulates the CD13 promoter in endothelial cells and myelopoiesis, and contributes to chondrocyte differentiation during bone development. It binds specific DNA sequences such as T-MARE sites in crystallin promoters, the G1 element in the glucagon promoter, and AT-rich regions in the CD13 promoter. Notably, Maf can act as either an oncogene or tumor suppressor depending on cellular context and represses antioxidant response element (ARE)-mediated transcription when overexpressed. The full-length protein is localized to the nucleus, consistent with its transcriptional functions.