Recombinant MAX protein (His tag)

Catalog Number	544747
Synonyms	Class D basic helix-loop-helix protein 4; bHLHd4; Myc-associated factor X
Species	Human
Expression System	E. coli
Accession	P61244
Molecular Weight	Predictes a molecular mass of 16.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	2-129
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 2-129 aa (P61244) 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	Recombinant Human MAX Protein (Fragment 2-129) is a high-purity protein fragment encompassing the essential bHLH domain, ideal for investigating DNA-binding interactions and transcriptional regulation mechanisms in research settings. Protein max (MAX), encoded by the gene MAX in Homo sapiens, functions as a key transcription regulator. It forms sequence-specific DNA-binding complexes with MYC or MAD, recognizing the core sequence 5'-CAC[GA]TG-3'. The MYC:MAX complex acts as a transcriptional activator, while the MAD:MAX complex serves as a repressor, and MAX may also repress transcription by recruiting chromatin remodeling complexes involving H3 'Lys-9' histone methyltransferase activity. Additionally, it represses MYC transcriptional activity from E-box elements. MAX is primarily localized in the nucleus and has been observed in cell projections such as dendrites, underscoring its role in nuclear processes and potential involvement in cellular structures.