Recombinant MXL2 protein (His tag)

Catalog Number	532887
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q9TZ70
Gene ID	175184
Molecular Weight	Predictes a molecular mass of 19.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	44-205
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 44-205 aa (Q9TZ70) 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 Max-like protein homolog 2 (mxl-2) fragment (residues 44-205) from Caenorhabditis elegans, encompassing the complete bHLH functional domain. This high-purity fragment serves as an essential tool for investigating transcription factor mechanisms, longevity pathways, and stress response signaling in research applications. Max-like protein homolog 2 is a multifunctional transcription factor in C. elegans that binds E-box motifs (5'-CACGTG-3'), typically forming heterodimeric complexes with mml-1. It plays critical roles in modulating longevity through TOR signaling, dietary restriction, germline signaling, and insulin-like pathways. The protein contributes to autophagy regulation, oxidative stress resistance, and ray precursor cell migration during male tail development through extracellular matrix component regulation. Additionally, it promotes microsporidian pathogen infection through non-canonical pathways. Subcellular localization is primarily nuclear, with occasional presence in cytoplasm and mitochondria, reflecting its diverse functional repertoire in cellular signaling and stress adaptation.