Recombinant MXL1 protein (His tag)

Catalog Number	530843
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	G5EEH5
Gene ID	179557
Molecular Weight	Predictes a molecular mass of 15.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	1-124
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-124 aa (G5EEH5) 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 1 (MXL-1) fragment (residues 1-124) from Caenorhabditis elegans, encompassing the complete bHLH domain. This high-purity protein is ideal for investigating transcriptional regulation mechanisms, dietary restriction responses, and neural regeneration pathways in research applications. Max-like protein 1 (MXL-1) is a key transcriptional regulator in C. elegans that binds E-box motifs (5'-CACGTG-3') through heterodimerization with mdl-1. It plays critical roles in lifespan control during dietary restriction, aging-related protein homeostasis, and microsporidian pathogen response. MXL-1 also promotes axon regeneration through svh-2 expression regulation and intersects with insulin-like signaling pathways. The protein localizes to the nucleus, consistent with its DNA-binding function. This recombinant fragment preserves the essential bHLH domain, enabling targeted studies of its molecular interactions and regulatory functions.