Recombinant LIN41 protein (His tag)

Catalog Number	533481
Synonyms	Abnormal cell lineage protein 41
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q9U489
Gene ID	172760
Molecular Weight	Predictes a molecular mass of 36.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	760-1075
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 760-1075 aa (Q9U489) 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 Protein lin-41 (Abnormal cell lineage protein 41) Fragment (residues 760-1075) from Caenorhabditis elegans is a 316-amino acid segment engineered for stability and solubility, ideal for structural studies, biochemical assays, and investigating post-transcriptional gene regulation mechanisms. Protein lin-41 is a heterochronic protein in Caenorhabditis elegans that functions downstream of let-7 in temporal patterning, critical for developmental timing processes such as hypodermal seam cell division, fusion events, and adult alae production. It represses lin-29 during late larval stages to prevent premature differentiation and promotes cell division. Lin-41 is involved in post-transcriptional gene regulation through direct RNA-binding activity, triggering either mRNA decay or translational repression depending on target site location (5'UTR or 3'UTR). It specifically degrades the mRNA of transcription factor dmd-3 to regulate male tail tip morphogenesis and plays a role in the sexual maturation of the nervous system. The protein is localized in the cytoplasm and P-bodies, facilitating its role in RNA metabolism and developmental timing.