Recombinant VIT4 protein (His tag)

Catalog Number	534100
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	P18947
Gene ID	180646
Molecular Weight	Predictes a molecular mass of 11.33 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	1520-1603
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 1520-1603 aa (P18947) 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 Vitellogenin-4 (vit-4) Fragment (residues 1520-1603) from Caenorhabditis elegans, a stable and soluble 84-amino acid unit ideal for structural biology and biochemical studies of this key developmental protein. Vitellogenin-4 serves as the precursor to egg-yolk proteins, providing essential nutrients during embryonic development in Caenorhabditis elegans. Beyond its nutritional role, recent research indicates that vitellogenins collectively contribute to lifespan modulation through induction of autophagy and lysosomal lipolysis. The full-length protein is secreted into the extracellular space, facilitating its functional roles. This specific fragment was computationally selected to represent a structurally stable and soluble region, enabling detailed investigation of vitellogenin properties without domain interference.