Recombinant APTF1 protein (His tag)

Catalog Number	534138
Synonyms	AP2 transcription factor aptf-1
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q09585
Gene ID	187043
Molecular Weight	Predictes a molecular mass of 25.60 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	152-365
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 152-365 aa (Q09585) 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 Transcription factor aptf-1 (AP2 transcription factor aptf-1) fragment (aa 152-365) from Caenorhabditis elegans, designed for structural and biochemical studies. This stable, soluble fragment enables research into the molecular mechanisms of sleep regulation and neuropeptide signaling. Transcription factor aptf-1 is essential for sleep-like behavioral quiescence in Caenorhabditis elegans larvae, functioning within the sleep-active ring interneuron RIS. It responds to neuropeptide signaling and regulates the expression of the sleep-inducing neuropeptide flp-11, playing a critical role in neural control of sleep. The protein localizes to the nucleus, where it directs gene expression involved in behavioral states. This recombinant fragment (aa 152-365) was computationally optimized for stability and solubility, facilitating experimental analysis of aptf-1's functional domains.