Recombinant RUVB1 protein (His tag)

Catalog Number	533098
Synonyms	Pontin
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	O17607
Gene ID	179388
Molecular Weight	Predictes a molecular mass of 50.39 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 54 kDa band.

Product Information

Sequence Region	36-476
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 36-476 aa (O17607) 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 RuvB-like 1 (Pontin) fragment from Caenorhabditis elegans, encompassing residues 36-476, is a high-purity protein ideal for investigating ATP-dependent helicase activity, chromatin remodeling, and roles in developmental signaling pathways. This stable, soluble fragment supports structural and biochemical studies. RuvB-like 1 (Pontin) is a multifunctional protein with single-stranded DNA-stimulated ATPase and 3' to 5' DNA helicase activities, implicating it in nuclear processes such as DNA recombination, transcription, and chromatin remodeling. It participates in chromatin remodeling complexes that exchange histones and shift nucleosomes, facilitating transcriptional activation and DNA repair. In C. elegans, RuvB-like 1 is involved in the Ce-Tor signaling pathway, regulating ribosomal maturation and protein synthesis by promoting nucleolar localization of box C/D snoRNPs. It antagonizes the transcription factor pha-4 to influence postembryonic development and adult longevity and plays critical roles in pharyngeal and gonadal development. The protein localizes to both the cytoplasm and nucleus, underscoring its diverse cellular functions.