Recombinant SIN3 protein (His tag)

Catalog Number	530812
Synonyms	Histone deacetylase complex subunit sin-3; Transcriptional corepressor sin-3
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	A5JYW9
Gene ID	172628
Molecular Weight	Predictes a molecular mass of 26.40 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	834-1044
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 834-1044 aa (A5JYW9) 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	This recombinant protein product features a stable and soluble fragment (residues 834-1044) of the Paired amphipathic helix protein sin-3 from Caenorhabditis elegans. It represents a structurally optimized segment of the transcriptional corepressor sin-3, ideal for investigating its role in histone modification and gene regulation through biochemical and structural studies. The full-length Paired amphipathic helix protein sin-3 (UniProt ID: A5JYW9) functions as a transcriptional repressor and a key subunit of the histone deacetylase complex (HDAC) in Caenorhabditis elegans. It is essential for depositing dimethylated lysine-9 on histone H3 (H3K9me2) during meiosis, which influences chromatin organization on asynapsed chromosomes. Additionally, sin-3 contributes to developmental processes such as male tail ray patterning and fusion, likely mediated by HDAC activity. The protein is localized to the nucleus, underscoring its direct involvement in epigenetic regulation and transcriptional control.