Recombinant SET9 protein (His tag)

Catalog Number	534292
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	O44498
Gene ID	177196
Molecular Weight	Predictes a molecular mass of 36.16 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	896-1198
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 896-1198 aa (O44498) 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 Histone-lysine N-methyltransferase set-9 fragment (residues 896-1198) from Caenorhabditis elegans, encompassing the complete SET domain. This high-purity protein is an essential tool for investigating histone methylation mechanisms, transcriptional regulation, and lifespan control pathways in research applications. Histone-lysine N-methyltransferase set-9 (UniProt ID: O44498) is a nuclear-localized enzyme involved in epigenetic regulation through histone methylation. It functions in transcriptional regulation and, together with set-26, negatively regulates lifespan through a germline-independent mechanism that partially depends on daf-16. Additionally, set-9 plays a critical role in germline development and maintenance by potentially restricting H3K4me3 methylation marks to specific germline target genes. The provided fragment (896-1198) contains the functional SET domain, enabling focused studies on domain-specific methyltransferase activity and its contributions to epigenetic signaling and cellular processes.