Recombinant ASH2 protein (His tag)

Catalog Number	533833
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	G5EFZ3
Gene ID	174838
Molecular Weight	Predictes a molecular mass of 38.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	243-570
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 243-570 aa (G5EFZ3) 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 Set1/Ash2 histone methyltransferase complex subunit ash-2 fragment (amino acids 243-570) from Caenorhabditis elegans. This 328-amino acid fragment encompasses the complete B30.2/SPRY functional domain, providing researchers with a specialized tool for investigating domain-specific functions in epigenetic regulation and lifespan inheritance mechanisms. The full-length Set1/Ash2 histone methyltransferase complex subunit ash-2 is a nuclear protein that functions as a critical component of the set-2/ash-2 histone methyltransferase complex. This complex is essential for di- and trimethylation at Lys-4 of histone H3, a key epigenetic mark associated with transcriptional activation. Beyond its role in chromatin modification, ash-2 has been implicated in the epigenetic inheritance of lifespan across multiple generations. It acts as a transcriptional regulator in the germline to limit somatic longevity, potentially through regulation of lipid metabolism pathways that signal from the germline to the intestine, thereby preventing accumulation of mono-unsaturated fatty acids. The protein's nuclear localization underscores its direct involvement in chromatin-mediated gene regulation processes.