Recombinant PHF13 protein (His tag)

Catalog Number	545359
Synonyms	Survival time-associated PHD finger protein in ovarian cancer 1; SPOC1
Species	Human
Expression System	E. coli
Accession	Q86YI8
Molecular Weight	Predictes a molecular mass of 13.42 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	200-300
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 200-300 aa (Q86YI8) 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 Human PHD Finger Protein 13 (PHF13) Fragment (aa 200-300) is a high-quality, stable protein fragment designed for chromatin and DNA damage response studies. This 101-amino acid segment, derived from the human SPOC1 protein, offers excellent solubility and is ideal for structural, biochemical, and functional assays investigating epigenetic regulation and mitotic processes. PHD Finger Protein 13 (PHF13/SPOC1) is a chromatin-associated nuclear protein that plays a critical role in modulating chromatin structure and DNA damage response. It binds to H3K4me3-containing chromatin and promotes DNA condensation by recruiting corepressors including TRIM28 and the H3K9 methyltransferase SETDB1. PHF13 is essential for normal chromosome condensation and separation during mitosis, enhances H3K9 trimethylation by increasing chromatin-associated levels and activity of H3K9 methyltransferases, and is required for testicular stem-cell differentiation and sustained spermatogenesis. The protein is predominantly chromatin-bound with minor nucleoplasmic localization, positioning it as a key regulator of epigenetic modifications and genomic stability.