Recombinant CHTOP protein (His tag)

Catalog Number	548580
Synonyms	Friend of PRMT1 protein; Small arginine- and glycine-rich protein; SRAG
Species	Human
Expression System	E. coli
Accession	Q9Y3Y2
Molecular Weight	Predictes a molecular mass of 11.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	2-88
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 2-88 aa (Q9Y3Y2) 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 Chromatin target of PRMT1 protein (CHTOP) fragment (aa 2-88) is a high-purity, stable protein designed for structural and biochemical studies. This soluble fragment retains key functional characteristics, making it ideal for investigating transcriptional regulation, mRNA nuclear export, and epigenetic mechanisms in cancer research. The full-length CHTOP protein plays critical roles in transcriptional activation and mRNA processing. It functions as a ligand-dependent coactivator for estrogen receptor target genes and participates in fetal globin gene silencing. CHTOP recruits the 5FMC complex to ZNF148 for desumoylation-mediated transactivation and is essential in glioblastomagenesis through its association with the methylosome complex, where it binds 5-hydroxymethylcytosine and promotes H4R3 methylation. Additionally, CHTOP is a key component of the TREX complex, coupling mRNA transcription, processing, and nuclear export by enhancing DDX39B activity and NXF1 RNA binding. Located primarily in the nucleus, CHTOP localizes to nucleoli, nucleoplasm, and nuclear speckles, with specific association to perispeckles where TREX complex assembly occurs, underscoring its significance in gene expression and RNA metabolism pathways.