Recombinant CHMP7 protein (His tag)

Catalog Number	543265
Synonyms	Chromatin-modifying protein 7
Species	Human
Expression System	E. coli
Accession	Q8WUX9
Molecular Weight	Predictes a molecular mass of 29.29 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	144-390
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 144-390 aa (Q8WUX9) 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 247-amino acid fragment (residues 144-390) of Human Charged Multivesicular Body Protein 7 (CHMP7), an essential ESCRT-III-like protein involved in nuclear envelope dynamics and endosomal sorting. The fragment has been computationally optimized for stability and solubility, making it ideal for structural studies and biochemical characterization. Charged Multivesicular Body Protein 7 (CHMP7) is a crucial ESCRT-III-like protein that plays dual roles in cellular processes. During late anaphase, CHMP7 recruits the ESCRT-III complex to the nuclear envelope, facilitating nuclear envelope sealing and mitotic spindle disassembly in coordination with SPAST. The protein is recruited to the reforming nuclear envelope by LEMD2 during anaphase. Additionally, CHMP7 functions in the endosomal sorting pathway, contributing to intracellular trafficking mechanisms. The protein exhibits a diffuse cytoplasmic localization with punctate distribution in perinuclear regions and specifically localizes to the reforming nuclear envelope on chromatin disks during late anaphase. These functions highlight CHMP7's importance in cell division and membrane remodeling processes.