Recombinant CHM4C protein (His tag)

Catalog Number	545651
Synonyms	Chromatin-modifying protein 4c; CHMP4c; SNF7 homolog associated with Alix 3; SNF7-3; hSnf7-3; Vacuolar protein sorting-associated protein 32-3; Vps32-3; hVps32-3
Species	Human
Expression System	E. coli
Accession	Q96CF2
Molecular Weight	Predictes a molecular mass of 22.19 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	1-179
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 1-179 aa (Q96CF2) 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 CHMP4C Protein (Fragment 1-179) is a high-quality, soluble fragment of Charged Multivesicular Body Protein 4c, designed for structural and functional studies. This fragment represents a stable, biochemically active region ideal for investigating ESCRT-III complex dynamics, cytokinesis regulation, and endosomal sorting mechanisms in vitro. Charged Multivesicular Body Protein 4c (CHMP4C) is a core component of the Endosomal Sorting Required for Transport complex III (ESCRT-III), which plays a critical role in multivesicular body (MVB) formation and the sorting of endosomal cargo proteins into intraluminal vesicles for lysosomal degradation. Beyond its function in endosomal trafficking, CHMP4C is essential in the cytokinesis checkpoint, where it helps delay abscission to prevent premature resolution of chromosome bridges and DNA damage accumulation. Phosphorylation by AURKB regulates its localization to the midbody ring during late cytokinesis, enabling interaction with VPS4 and ANCHR to control the timing of cell division. CHMP4C also contributes to the release of exosomal proteins such as SDCBP and CD63, and supports the budding of enveloped viruses like HIV-1. In human cells, CHMP4C localizes to the cytoplasm, cytosol, late endosome membranes, and the midbody ring during cytokinesis, underscoring its multifaceted roles in membrane remodeling and cell division.