Recombinant CHM1B protein (His tag)

Catalog Number	547579
Synonyms	CHMP1.5; Chromatin-modifying protein 1b; CHMP1b; Vacuolar protein sorting-associated protein 46-2; Vps46-2; hVps46-2
Species	Human
Expression System	E. coli
Accession	Q7LBR1
Molecular Weight	Predictes a molecular mass of 23.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	1-199
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 1-199 aa (Q7LBR1) 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 Charged Multivesicular Body Protein 1b (CHMP1.5) Fragment (residues 1-199) is a high-purity, soluble protein designed for structural and biochemical studies. This fragment encompasses the full-length human CHMP1B protein, optimized for stability and solubility, enabling researchers to investigate its role in endosomal sorting, cytokinesis, and viral budding processes with precision. Charged Multivesicular Body Protein 1b (CHMP1B) is a peripherally associated component of the Endosomal Sorting Required for Transport complex III (ESCRT-III), which plays a critical role in the formation of multivesicular bodies (MVBs). MVBs facilitate the sorting of endosomal cargo proteins into intraluminal vesicles for degradation in lysosomes, regulating key processes such as growth factor receptor turnover and lipid metabolism. Beyond MVBs, CHMP1B is involved in topologically similar membrane fission events, including cytokinesis and the release of enveloped viruses like HIV-1. It localizes to the cytoplasm, cytosol, and late endosome membranes, and is notably found at the midbody during cell division, where it recruits proteins such as VPS4A/VPS4B and SPAST. The provided fragment (residues 1-199) represents a stable, soluble unit ideal for elucidating the molecular mechanisms underlying these essential cellular functions.