Recombinant CHM2A protein (His tag)

Catalog Number	544112
Synonyms	Chromatin-modifying protein 2a; CHMP2a; Putative breast adenocarcinoma marker BC-2; Vacuolar protein sorting-associated protein 2-1; Vps2-1; hVps2-1
Species	Human
Expression System	E. coli
Accession	O43633
Molecular Weight	Predictes a molecular mass of 21.91 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	1-174
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 1-174 aa (O43633) 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 CHMP2A Protein (Fragment 1-174) is a high-purity, stable fragment of Charged Multivesicular Body Protein 2a, optimized for structural and functional studies. This product supports research into endosomal sorting, viral budding, and nuclear envelope dynamics, offering researchers a reliable tool for biochemical and cell-based assays. Charged Multivesicular Body Protein 2a (CHMP2A) 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. This protein is also involved in topologically equivalent membrane fission events, including cytokinesis, nuclear envelope sealing during anaphase, and mitotic spindle disassembly. Additionally, CHMP2A participates in the budding of enveloped viruses, such as HIV-1, facilitating virus release. It localizes to late endosome membranes, the nuclear envelope, and the midbody of dividing cells, highlighting its importance in diverse cellular processes. The provided fragment (residues 1-174) represents a stable, soluble unit ideal for investigating these functions in vitro.