Recombinant VPS4A protein (His tag)

Catalog Number	541550
Synonyms	Protein SKD2; VPS4-1; hVPS4
Species	Human
Expression System	E. coli
Accession	Q9UN37
Molecular Weight	Predictes a molecular mass of 38.28 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	108-437
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 108-437 aa (Q9UN37) 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 Vacuolar protein sorting-associated protein 4A (VPS4A) fragment (residues 108-437) from Homo sapiens, offering a stable and soluble unit for structural and biochemical studies. This fragment retains functional relevance for investigating endosomal sorting and membrane fission mechanisms. VPS4A is an AAA-ATPase (EC 3.6.4.6) critical for the endosomal multivesicular body (MVB) pathway, where it disassembles ESCRT-III complexes to facilitate membrane fission and cytoplasmic recycling. It localizes to late endosome membranes, the midbody during cytokinesis, and the mitotic spindle, playing essential roles in endosome size regulation, chromosome segregation, nuclear envelope sealing, and abscission. VPS4A also supports exosomal release of proteins like SDCBP and CD63 and is implicated in viral budding processes (e.g., HIV-1). The provided fragment (108-437) is a computationally optimized, stable region suitable for probing these functions without domain inclusions.