Recombinant VP26B protein (His tag)

Catalog Number	548698
Synonyms	Vesicle protein sorting 26B
Species	Human
Expression System	E. coli
Accession	Q4G0F5
Molecular Weight	Predictes a molecular mass of 36.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 40 kDa band.

Product Information

Sequence Region	1-297
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 1-297 aa (Q4G0F5) 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 VPS26B (Vacuolar protein sorting-associated protein 26B) fragment (amino acids 1-297) is a high-quality protein preparation ideal for studying retromer complex function and intracellular trafficking mechanisms. This stable, soluble fragment retains key functional properties, making it suitable for structural studies, biochemical assays, and cargo sorting investigations. VPS26B functions as an essential component of the retromer cargo-selective complex (CSC), which serves as the core functional unit preventing missorting of transmembrane cargo proteins into lysosomal degradation pathways. The protein localizes to both early and late endosomes and participates in multiple retromer-mediated trafficking routes, including retrograde transport from endosomes to the trans-Golgi network and endosome-to-plasma membrane recycling. VPS26B acts redundantly with VPS26A in SNX-27 mediated endocytic recycling pathways and serves as a recruitment hub for other trafficking machinery components such as the WASH complex. Its involvement in specific cargo transport, including SLC2A1/GLUT1 recycling, highlights its importance in maintaining cellular homeostasis and membrane protein distribution.