Recombinant VPS36 protein (His tag)

Catalog Number	545338
Synonyms	ELL-associated protein of 45 kDa; ESCRT-II complex subunit VPS36
Species	Human
Expression System	E. coli
Accession	Q86VN1
Molecular Weight	Predictes a molecular mass of 24.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	1-198
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 1-198 aa (Q86VN1) 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 VPS36 Fragment (1-198) is a high-purity protein derived from human Vacuolar protein-sorting-associated protein 36, designed to encompass the GLUE N-terminal and C-terminal domains. This fragment serves as an essential tool for investigating endosomal sorting, multivesicular body formation, and ubiquitin-binding mechanisms in cellular trafficking pathways. Vacuolar protein-sorting-associated protein 36 (VPS36) is a key component of the ESCRT-II complex, which plays a critical role in endosomal sorting and multivesicular body (MVB) formation. This complex mediates the delivery of transmembrane proteins to lysosomes for degradation and is involved in recruiting the ESCRT-III complex. VPS36's ability to bind ubiquitin and phosphoinosides, such as PtdIns(3,4,5)P3, facilitates the sorting of ubiquitinated cargo proteins. It localizes to the cytoplasm, endosomes, late endosomes, and the nucleus, where it colocalizes with ubiquitinated proteins and participates in vesicle formation. Additionally, the ESCRT-II complex may contribute to transcription regulation through interactions with ELL, highlighting its multifunctional significance in cellular processes.