Recombinant CLVS2 protein (His tag)

Catalog Number	545150
Synonyms	Retinaldehyde-binding protein 1-like 2; clathrin vesicle-associated Sec14 protein 2
Species	Human
Expression System	E. coli
Accession	Q5SYC1
Molecular Weight	Predictes a molecular mass of 33.30 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	1-272
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-272 aa (Q5SYC1) 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 Clavesin-2 (CLVS2) Fragment (1-272) is a high-quality protein preparation encompassing the complete CRAL-TRIO functional domain. This fragment serves as an essential research tool for investigating neuronal endosomal-lysosomal morphology and phosphatidylinositol binding mechanisms. Clavesin-2, also known as Retinaldehyde-binding protein 1-like 2 or clathrin vesicle-associated Sec14 protein 2, plays a critical role in maintaining normal morphology of late endosomes and/or lysosomes in neurons. The protein demonstrates specific binding affinity for phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2), indicating its involvement in phosphoinositide-mediated signaling pathways. Subcellular localization studies reveal its presence in multiple membrane compartments including the Golgi apparatus, trans-Golgi network, clathrin-coated vesicles, and early endosomes, where it functions as a peripheral membrane protein. This distribution pattern underscores its importance in intracellular trafficking and membrane dynamics within neuronal cells.