Recombinant VAMP8 protein (His tag)

Catalog Number	548123
Synonyms	VAMP-8; Endobrevin; EDB
Species	Human
Expression System	E. coli
Accession	Q9BV40
Molecular Weight	Predictes a molecular mass of 10.35 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	1-75
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-75 aa (Q9BV40) 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 VAMP-8 (Endobrevin) Fragment (aa 1-75) - A high-purity protein fragment encompassing the complete v-SNARE coiled-coil homology domain (aa 12-72), designed as an essential research tool for studying SNARE-mediated membrane fusion mechanisms in autophagy, endosomal trafficking, and cellular secretion pathways. Vesicle-associated membrane protein 8 (VAMP-8), also known as Endobrevin, is a crucial SNARE protein that drives membrane fusion events essential for cellular function. As a key component of the SNARE complex, VAMP-8 plays multiple critical roles including: facilitating autophagosome-lysosome fusion during autophagy through interaction with the STX17-SNAP29 complex; regulating dense-granule secretion in platelets; controlling enzyme secretion in pancreatic acinar cells; mediating homotypic fusion of early and late endosomes; and participating in cell division through midbody abscission. The protein localizes to multiple membrane compartments including lysosomes, early and late endosomes, cell membranes, and zymogen granules, functioning as a single-pass type IV membrane protein. VAMP-8 also contributes to innate immunity by participating in TRIM6-dependent activation of type I interferon antiviral responses, highlighting its broad significance in cellular physiology and disease mechanisms.