Recombinant PGAP6 protein (His tag)

Catalog Number	541305
Synonyms	GPI processing phospholipase A2; GPI-PLA2; Protein M83; Transmembrane protein 6; Transmembrane protein 8; Transmembrane protein 8A
Species	Human
Expression System	E. coli
Accession	Q9HCN3
Molecular Weight	Predictes a molecular mass of 23.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	348-545
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 348-545 aa (Q9HCN3) 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	Introducing the recombinant human Post-GPI attachment to proteins factor 6 (PGAP6) fragment (residues 348-545), a high-purity protein designed for studying GPI-anchor remodeling and EGF-like domain functionality. This 198-amino acid fragment includes the complete EGF-like domain, making it an ideal tool for investigating lipid processing, cell signaling modulation, and membrane protein interactions in controlled experimental settings. The full-length PGAP6 protein is a multi-pass transmembrane enzyme (EC 3.1.1.4) critical for GPI-anchor maturation through its phospholipase A2 activity. It remodels GPI-anchors by generating saturated fatty chains and is involved in shedding GPI-anchored proteins like CRIPTO, thereby modulating Nodal signaling pathways. Additionally, PGAP6 supports RAC1 translocation to the plasma membrane by stabilizing CAV1-enriched membrane domains. Located primarily in the cell membrane and lysosome membrane, PGAP6 plays key roles in cellular signaling and membrane dynamics, though it lacks fusogenic activity. The provided fragment (348-545) encompasses the EGF-like domain, enabling focused research on domain-specific mechanisms in GPI-anchor processing and related biological processes.