Recombinant PIGG protein (His tag)

Catalog Number	540457
Synonyms	GPI7 homolog; hGPI7; Phosphatidylinositol-glycan biosynthesis class G protein; PIG-G
Species	Human
Expression System	E. coli
Accession	Q5H8A4
Molecular Weight	Predictes a molecular mass of 49.25 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 49 kDa band.

Product Information

Sequence Region	1-431
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 1-431 aa (Q5H8A4) 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	This recombinant protein product features a 431-amino acid fragment (residues 1-431) of human GPI ethanolamine phosphate transferase 2 catalytic subunit (PIGG), a key enzyme in glycosylphosphatidylinositol-anchor biosynthesis. The fragment has been computationally optimized for stability and solubility, making it ideal for structural studies and biochemical assays investigating GPI anchor assembly mechanisms. The full-length GPI ethanolamine phosphate transferase 2 catalytic subunit (PIGG/hGPI7) functions as the catalytic component of the ethanolamine phosphate transferase 2 complex in the endoplasmic reticulum membrane. This multi-pass membrane protein catalyzes the eleventh step of GPI-anchor biosynthesis by transferring an ethanolamine phosphate group from phosphatidylethanolamine to the second alpha-1,6-linked mannose of the GPI intermediate H7, generating the H8 intermediate. This enzymatic activity is essential for proper maturation of GPI-anchored proteins, which play critical roles in membrane attachment and signaling functions. The protein's endoplasmic reticulum membrane localization reflects its integral role in the GPI-anchor biosynthesis pathway.