Recombinant PIGS protein (His tag)

Catalog Number	543433
Synonyms	Phosphatidylinositol-glycan biosynthesis class S protein
Species	Human
Expression System	E. coli
Accession	Q96S52
Molecular Weight	Predictes a molecular mass of 54.80 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 55 kDa band.

Product Information

Sequence Region	40-517
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 40-517 aa (Q96S52) 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 is a fragment of the human GPI-anchor transamidase component PIGS (residues 40-517), designed for structural and biochemical studies. It represents a stable, soluble unit of the protein, facilitating research into GPI-anchor biosynthesis and protein post-translational modifications. The full-length PIGS protein is a critical component of the glycosylphosphatidylinositol-anchor (GPI-anchor) transamidase complex in humans, which catalyzes the linkage between proproteins and GPI-anchors during GPI-anchored protein biosynthesis. This process is essential for anchoring diverse proteins to cell membranes, influencing their localization and function. PIGS is localized to the endoplasmic reticulum membrane as a multi-pass membrane protein, underscoring its role in intracellular protein processing and membrane association pathways.