Recombinant PHLD protein (His tag)

Catalog Number	547160
Synonyms	PI-G PLD; Glycoprotein phospholipase D; Glycosyl-phosphatidylinositol-specific phospholipase D; GPI-PLD; GPI-specific phospholipase D
Species	Human
Expression System	E. coli
Accession	P80108
Molecular Weight	Predictes a molecular mass of 52.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	362-840
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 362-840 aa (P80108) 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 Phosphatidylinositol-glycan-specific phospholipase D (PI-G PLD) Fragment (aa 362-840) is a high-quality protein product designed for structural and biochemical studies. This 479-amino acid fragment represents a stable and soluble unit of the enzyme, which plays a critical role in cleaving glycosylphosphatidylinositol (GPI) anchors to release proteins from cell membranes, making it an essential tool for investigating GPI-anchored protein biology. Phosphatidylinositol-glycan-specific phospholipase D (PI-G PLD), encoded by the GPLD1 gene in humans, is a secreted enzyme that specifically hydrolyzes the inositol phosphate linkage in proteins anchored by phosphatidylinositol glycans (GPI-anchored proteins). This catalytic activity results in the release of these proteins from the membrane surface, playing a crucial role in the regulation and turnover of GPI-anchored proteins involved in various cellular processes. As a secreted enzyme, PI-G PLD functions extracellularly, making it accessible for studying its role in modifying cell surface proteins and its potential implications in cellular signaling and communication pathways.