Recombinant PLPL4 protein (His tag)

Catalog Number	539949
Synonyms	Calcium-independent phospholipase A2-eta; iPLA2-eta; Protein GS2
Species	Human
Expression System	E. coli
Accession	P41247
Molecular Weight	Predictes a molecular mass of 29.64 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	1-253
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-253 aa (P41247) 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 PNPLA4 (Patatin-like phospholipase domain-containing protein 4) Fragment (aa 1-253). This high-purity protein includes the complete PNPLA domain, offering a specialized tool for investigating triacylglycerol lipase activity, fatty acid transfer mechanisms, and phospholipase functions in metabolic research. Patatin-like phospholipase domain-containing protein 4 (PNPLA4), also known as calcium-independent phospholipase A2-eta (iPLA2-eta), is a multifunctional enzyme with significant roles in lipid metabolism. It demonstrates robust triacylglycerol lipase activity, facilitates fatty acid transfer to retinol, hydrolyzes retinyl esters, and generates 1,3-diacylglycerol from triglycerides. Additionally, PNPLA4 possesses acylglycerol transacylase and phospholipase A2 activities, contributing to its involvement in diverse lipid remodeling processes. The protein is localized to mitochondria, underscoring its potential importance in mitochondrial lipid homeostasis and energy regulation. This recombinant fragment provides targeted access to these key enzymatic functions for mechanistic studies.