Recombinant PLS3 protein (His tag)

Catalog Number	543729
Synonyms	PL scramblase 3; Ca(2+)-dependent phospholipid scramblase 3
Species	Human
Expression System	E. coli
Accession	Q9NRY6
Molecular Weight	Predictes a molecular mass of 23.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	66-265
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 66-265 aa (Q9NRY6) 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 Phospholipid Scramblase 3 (PLSCR3) Fragment (aa 66-265) is a high-purity protein designed for studying mitochondrial lipid dynamics and apoptosis regulation. This 200-amino acid fragment offers a stable and soluble unit ideal for structural, biochemical, and functional assays. Phospholipid scramblase 3 (PLSCR3) is a calcium-dependent enzyme that catalyzes the rapid bidirectional movement of phospholipids across mitochondrial membranes, a process critical for maintaining mitochondrial respiratory function, morphology, and apoptotic signaling. Located primarily in the mitochondrial membrane as a single-pass type II protein, PLSCR3 mediates cardiolipin translocation from the inner to outer mitochondrial membrane, enhancing cytochrome c release and amplifying caspase activity during TNFSF10-induced apoptosis. It also regulates cardiolipin biosynthesis and resynthesis, playing a pivotal role in cellular stress responses and programmed cell death pathways.