Recombinant PTSS2 protein (His tag)

Catalog Number	543517
Synonyms	PSS-2; PtdSer synthase 2; Serine-exchange enzyme II
Species	Human
Expression System	E. coli
Accession	Q9BVG9
Molecular Weight	Predictes a molecular mass of 21.73 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	148-313
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 148-313 aa (Q9BVG9) 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 Phosphatidylserine Synthase 2 (PSS-2) Fragment (residues 148-313) - a highly purified protein fragment ideal for structural studies and biochemical characterization of this key enzyme in phospholipid metabolism. This 166-amino acid fragment represents a stable, soluble unit of PSS-2, optimized for research applications requiring high-quality recombinant protein. Phosphatidylserine Synthase 2 (PSS-2) is a crucial endoplasmic reticulum membrane enzyme that catalyzes the base-exchange reaction where the polar head group of phosphatidylethanolamine (PE) is replaced by L-serine to generate phosphatidylserine. The enzyme demonstrates substrate specificity, preferentially acting on phosphatidylethanolamine rather than phosphatidylcholine, and shows significant preference for docosahexaenoic acid (22:6n-3) at the sn-2 position. PSS-2 is localized to the endoplasmic reticulum membrane as a multi-pass membrane protein and is highly enriched in mitochondria-associated membranes (MAM), playing a vital role in phospholipid biosynthesis and membrane dynamics in human cells.