Recombinant SPCS protein (His tag)

Catalog Number	546003
Synonyms	Sec; Liver-pancreas antigen; LP; SLA-p35; SLA/LP autoantigen; Selenocysteine synthase; Sec synthase; Selenocysteinyl-tRNA(Sec) synthase; Sep-tRNA:Sec-tRNA synthase; SepSecS; Soluble liver antigen; SLA; UGA suppressor tRNA-associated protein; tRNA(Ser/Sec)-associated antigenic protein
Species	Human
Expression System	E. coli
Accession	Q9HD40
Molecular Weight	Predictes a molecular mass of 53.38 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	1-466
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 1-466 aa (Q9HD40) 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 O-phosphoseryl-tRNA(Sec) selenium transferase (SEPSECS) fragment (residues 1-466) is a high-quality protein preparation ideal for structural and biochemical studies. This fragment represents a stable, soluble unit of the enzyme, which plays a crucial role in selenocysteine biosynthesis and selenoprotein production. O-phosphoseryl-tRNA(Sec) selenium transferase (SEPSECS), also known as selenocysteine synthase, is a key enzyme in selenoprotein biosynthesis. It catalyzes the conversion of O-phosphoseryl-tRNA(Sec) to selenocysteinyl-tRNA(Sec), a critical step for incorporating selenocysteine into proteins. This enzyme is localized in the cytoplasm and is essential for the synthesis of various selenoproteins involved in antioxidant defense and redox regulation. The full-length protein has been identified as the liver-pancreas antigen (LP) and soluble liver antigen (SLA), with clinical relevance in autoimmune hepatitis research.