Recombinant SPCS2 protein (His tag)

Catalog Number	545006
Synonyms	Microsomal signal peptidase 25 kDa subunit; SPase 25 kDa subunit
Species	Human
Expression System	E. coli
Accession	Q15005
Molecular Weight	Predictes a molecular mass of 12.64 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	133-226
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 133-226 aa (Q15005) 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 Signal Peptidase Complex Subunit 2 (SPCS2) Fragment (residues 133-226) is a high-purity, soluble protein fragment designed for structural and biochemical studies. This 94-amino acid fragment represents a stable, functionally relevant region of the SPCS2 protein, which plays a critical role in protein processing within the endoplasmic reticulum. Signal peptidase complex subunit 2 (SPCS2) is a key component of the signal peptidase complex (SPC) in humans, located in the endoplasmic reticulum membrane as a multi-pass membrane protein. The SPC catalyzes the essential cleavage of N-terminal signal sequences from nascent proteins during their translocation into the endoplasmic reticulum lumen. SPCS2 enhances the enzymatic activity of the SPC and facilitates interactions among components at the translocation site, contributing to efficient protein maturation and cellular function. This fragment corresponds to residues 133-226, selected for its stability and solubility to enable detailed mechanistic and structural investigations.