Recombinant SC11C protein (His tag)

Catalog Number	548160
Synonyms	Microsomal signal peptidase 21 kDa subunit; SPase 21 kDa subunit; SEC11 homolog C; SEC11-like protein 3; SPC21
Species	Human
Expression System	E. coli
Accession	Q9BY50
Molecular Weight	Predictes a molecular mass of 17.89 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	49-192
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 49-192 aa (Q9BY50) 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 SEC11C (49-192) is a high-purity fragment of the signal peptidase complex catalytic subunit, designed for structural and biochemical studies. This 144-amino acid fragment represents a stable, soluble unit ideal for investigating the enzyme's role in cleaving signal peptides during protein translocation into the endoplasmic reticulum. The full-length SEC11C protein is a catalytic component of the signal peptidase complex (SPC) in humans, essential for cleaving N-terminal signal sequences from nascent proteins as they enter the endoplasmic reticulum lumen. It specifically targets signal peptides with hydrophobic alpha-helices shorter than 18-20 amino acids, a critical step in protein maturation and trafficking. Located in the endoplasmic reticulum membrane as a single-pass type II membrane protein, SEC11C plays a fundamental role in cellular protein processing and homeostasis, making it a key subject for research in protein biochemistry and cellular biology.