Recombinant TM7S3 protein (His tag)

Catalog Number	549103
Synonyms	Seven span transmembrane protein
Species	Human
Expression System	E. coli
Accession	Q9NS93
Molecular Weight	Predictes a molecular mass of 31.11 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	31-295
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 31-295 aa (Q9NS93) 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	This product is a recombinant fragment of the human Transmembrane 7 superfamily member 3 (TM7SF3) protein, spanning amino acids 31-295. It represents a stable and soluble unit of this seven-span transmembrane protein, which plays key roles in protecting pancreatic beta cells from cytokine-induced death and promoting insulin secretion. This fragment is ideal for structural studies, biochemical assays, and functional investigations into cellular stress responses. The full-length TM7SF3 protein is a multi-pass membrane protein located in the cell membrane. It functions as a critical regulator of cell survival, particularly in pancreatic beta cells, where it inhibits cytokine-induced cell death and enhances insulin secretion. Additionally, TM7SF3 acts as a downstream transcriptional target of p53, serving as a pro-survival homeostatic factor that mitigates cellular stress. It maintains protein homeostasis by attenuating endoplasmic reticulum (ER) stress and suppressing the unfolded protein response (UPR), thereby promoting cell survival under stress conditions.