Recombinant TSN14 protein (His tag)

Catalog Number	545489
Synonyms	Tspan-14; DC-TM4F2; Transmembrane 4 superfamily member 14
Species	Human
Expression System	E. coli
Accession	Q8NG11
Molecular Weight	Predictes a molecular mass of 15.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	114-232
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 114-232 aa (Q8NG11) 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 recombinant protein product features a stable and soluble fragment (amino acids 114-232) of human Tetraspanin-14 (Tspan-14), a key regulator of the ADAM10 metalloprotease. Designed for structural and biochemical studies, this fragment enables researchers to investigate Tspan-14's role in modulating ADAM10 trafficking and substrate specificity without the complexities of the full-length transmembrane protein. Tetraspanin-14 (Tspan-14) is a member of the TspanC8 subgroup of tetraspanins, which are integral membrane proteins localized to the cell membrane. Its primary biological significance lies in its interaction with ADAM10, a transmembrane metalloprotease. This interaction is essential for ADAM10's exit from the endoplasmic reticulum, enzymatic maturation, and trafficking to the cell surface. Furthermore, Tspan-14 helps determine ADAM10's substrate specificity; it negatively regulates cleavage of GP6 while promoting cleavage of CDH5. These functions highlight Tspan-14's critical role in regulating ADAM10-mediated proteolytic events, which are implicated in various cellular processes and potential disease pathways.