Recombinant TM39A protein (His tag)

Catalog Number	541367
Species	Human
Expression System	E. coli
Accession	Q9NV64
Molecular Weight	Predictes a molecular mass of 11.01 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	340-419
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 340-419 aa (Q9NV64) 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 Transmembrane protein 39A (TMEM39A) fragment (residues 340-419) is a high-purity, soluble protein product designed for structural and functional studies. This 80-amino acid fragment, derived from the human TMEM39A protein, is ideal for investigating autophagy regulation and phosphatidylinositol 4-phosphate dynamics in cellular pathways. Transmembrane protein 39A (TMEM39A) is a multi-pass membrane protein localized to the endoplasmic reticulum membrane in humans. It plays a critical role in regulating autophagy by controlling the spatial distribution and levels of intracellular phosphatidylinositol 4-phosphate (PtdIns(4)P) pools. This regulation occurs through TMEM39A's modulation of ER-to-Golgi trafficking of the phosphatidylinositide phosphatase SACM1L. Additionally, TMEM39A has been implicated in viral replication pathways, where it positively regulates encephalomyocarditis virus (EMCV) replication via autophagy-dependent mechanisms. The selected fragment (340-419) represents a stable, soluble region computationally optimized for experimental applications while maintaining relevance to the protein's native functional context.