Recombinant EMC1 protein (His tag)

Catalog Number	547751
Species	Human
Expression System	E. coli
Accession	Q8N766
Molecular Weight	Predictes a molecular mass of 36.67 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	23-339
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 23-339 aa (Q8N766) 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 ER Membrane Protein Complex Subunit 1 (EMC1) Fragment (aa 23-339) is a high-purity, stable protein designed for structural and functional studies. This 317-amino acid fragment retains key properties of the full-length EMC1, enabling researchers to investigate its critical role in membrane protein insertion and endoplasmic reticulum function. The full-length ER membrane protein complex subunit 1 (EMC1) is an essential component of the endoplasmic reticulum membrane protein complex (EMC) that facilitates the energy-independent insertion of newly synthesized membrane proteins into endoplasmic reticulum membranes. This complex preferentially accommodates proteins with weakly hydrophobic transmembrane domains or those containing destabilizing features such as charged and aromatic residues. EMC1 participates in both cotranslational insertion of multi-pass membrane proteins and post-translational insertion of tail-anchored proteins. Importantly, it controls the topology of multi-pass membrane proteins like G protein-coupled receptors by mediating proper cotranslational insertion of N-terminal transmembrane domains in an N-exo topology. As a single-pass type I membrane protein located in the endoplasmic reticulum membrane, EMC1 indirectly influences numerous cellular processes through its regulation of membrane protein insertion.