Recombinant EMC9 protein (His tag)

Catalog Number	548872
Synonyms	Protein FAM158A
Species	Human
Expression System	E. coli
Accession	Q9Y3B6
Molecular Weight	Predictes a molecular mass of 24.72 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	1-208
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 1-208 aa (Q9Y3B6) 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 EMC9 (ER membrane protein complex subunit 9) fragment (aa 1-208) is a high-purity protein designed for studying membrane protein insertion mechanisms. This fragment encompasses the complete MPN functional domain, making it an essential tool for investigating endoplasmic reticulum-associated processes in cellular and biochemical assays. EMC9, also known as Protein FAM158A, is a key component of the endoplasmic reticulum membrane protein complex (EMC) that facilitates the energy-independent insertion of newly synthesized membrane proteins into ER membranes. This complex specifically accommodates transmembrane domains with weak hydrophobicity or destabilizing features, playing crucial roles in both cotranslational insertion of multi-pass membrane proteins and post-translational insertion of tail-anchored proteins. Research has demonstrated its importance in controlling membrane topology of G protein-coupled receptors and various cellular processes through proper protein membrane integration. The protein localizes to the endoplasmic reticulum membrane as a peripheral membrane protein on the cytoplasmic side, positioning it strategically for its membrane insertion functions.