Recombinant TMC8 protein (His tag)

Catalog Number	547666
Synonyms	Epidermodysplasia verruciformis protein 2
Species	Human
Expression System	E. coli
Accession	Q8IU68
Molecular Weight	Predictes a molecular mass of 14.99 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	1-114
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-114 aa (Q8IU68) 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 TMC8 (Transmembrane channel-like protein 8) Fragment (aa 1-114) is a high-purity, stable protein fragment designed for structural and biochemical studies. This product enables researchers to investigate the regulatory roles of TMC8 in cellular processes, including zinc transport, calcium signaling, and apoptosis, in a soluble and experimentally accessible format. Transmembrane channel-like protein 8 (TMC8), also known as Epidermodysplasia verruciformis protein 2, is a multi-pass membrane protein localized to the endoplasmic reticulum, Golgi apparatus, and nuclear membranes in keratinocytes. It functions as a key regulatory protein in numerous cellular processes, forming complexes with TMC6/EVER1 and calcium-binding protein CIB1 to stabilize cellular components and facilitate zinc uptake into the ER via activation of zinc transporter ZNT1. TMC8 also modulates calcium signaling by inhibiting receptor-mediated calcium release and chloride channel activity, down-regulates zinc- and cytokine-induced transcription factors, and promotes TNF-induced apoptosis by sequestering TRADD and impairing pro-survival complex formation. These diverse roles highlight its importance in cellular homeostasis and disease mechanisms.