Recombinant ANO3 protein (His tag)

Catalog Number	541189
Synonyms	Transmembrane protein 16C
Species	Human
Expression System	E. coli
Accession	Q9BYT9
Molecular Weight	Predictes a molecular mass of 13.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	662-761
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 662-761 aa (Q9BYT9) 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 product is a recombinant fragment of Anoctamin-3 (Transmembrane protein 16C), corresponding to residues 662-761 of the human protein. It is designed for structural and biochemical studies, offering a stable and soluble unit ideal for investigating the protein's regulatory roles in potassium channel activity and phospholipid scrambling. Anoctamin-3, encoded by the ANO3 gene in humans, functions as a calcium-dependent phospholipid scramblase, facilitating the translocation of phosphatidylcholine and galactosylceramide across membranes. It also acts as a regulator of potassium channels, such as KCNT1/Slack, by enhancing channel conductance and sodium sensitivity, potentially modulating pain signaling pathways. Notably, it does not exhibit calcium-activated chloride channel activity. The protein is localized to the cell membrane as a multi-pass transmembrane protein, with evidence suggesting intracellular distribution. This fragment was selected computationally to represent a stable region, enabling focused analysis of its functional domains.