Recombinant TRPC3 protein (His tag)

Catalog Number	544930
Synonyms	TrpC3; Transient receptor protein 3; TRP-3; hTrp-3; hTrp3
Species	Human
Expression System	E. coli
Accession	Q13507
Molecular Weight	Predictes a molecular mass of 41.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	109-459
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 109-459 aa (Q13507) 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 Short Transient Receptor Potential Channel 3 (TrpC3) Fragment (aa 109-459) is a high-quality protein product designed for structural and biochemical studies. This 351-amino acid fragment, derived from the TRPC3 gene, represents a stable and soluble unit of the non-selective calcium-permeable cation channel, enabling researchers to investigate receptor-activated ion channel mechanisms with reliability and precision. The full-length Short Transient Receptor Potential Channel 3 (TrpC3), encoded by the TRPC3 gene in Homo sapiens, functions as a receptor-activated, non-selective calcium-permeable cation channel. It plays a critical role in cellular signaling pathways, potentially operated by phosphatidylinositol second messenger systems activated by receptor tyrosine kinases or G-protein coupled receptors, as supported by multiple studies (e.g., PubMed:29726814, PubMed:30139744). Located in the cell membrane as a multi-pass membrane protein, TrpC3 is involved in calcium ion permeation, contributing to essential physiological processes. The provided fragment (aa 109-459) was computationally selected to ensure stability and solubility, facilitating advanced research into its structural and functional properties without the complexities of the full-length membrane protein.