Recombinant TRPC6 protein (His tag)

Catalog Number	543910
Synonyms	TrpC6; Transient receptor protein 6; TRP-6
Species	Human
Expression System	E. coli
Accession	Q9Y210
Molecular Weight	Predictes a molecular mass of 40.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	95-438
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 95-438 aa (Q9Y210) 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 6 (TrpC6) Fragment (aa 95-438) is a high-purity protein designed for structural and biochemical studies. This 344-amino acid fragment represents a stable, soluble region of TRPC6, a key calcium-permeable cation channel, enabling researchers to investigate channel mechanisms without full-length expression challenges. The full-length TRPC6 protein forms a receptor-activated, non-selective calcium-permeable cation channel, primarily activated by diacylglycerol (DAG) independently of protein kinase C. It functions in calcium signaling pathways initiated by receptor tyrosine kinases or G-protein coupled receptors, though it appears insensitive to intracellular calcium store depletion. Located in the cell membrane as a multi-pass transmembrane protein, TRPC6 plays critical roles in cellular processes such as neuronal signaling, muscle contraction, and immune responses, with implications in cardiovascular and renal physiology. The provided fragment (aa 95-438) excludes transmembrane domains to enhance solubility while retaining relevance for functional and structural analyses.