Recombinant TRPC5 protein (His tag)

Catalog Number	543874
Synonyms	TrpC5; Transient receptor protein 5; TRP-5; hTRP-5; hTRP5
Species	Human
Expression System	E. coli
Accession	Q9UL62
Molecular Weight	Predictes a molecular mass of 43.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 44 kDa band.

Product Information

Sequence Region	1-363
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 1-363 aa (Q9UL62) 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 5 (TrpC5) Fragment (residues 1-363) - a high-quality protein preparation ideal for studying calcium-permeable cation channel function, neuronal signaling pathways, and structural analysis of this important TRP channel family member. Short Transient Receptor Potential Channel 5 (TrpC5) forms a receptor-activated non-selective calcium-permeable cation channel that plays crucial roles in neuronal function. This protein mediates calcium-dependent phosphatidylserine externalization and apoptosis in neurons through its association with PLSCR1. TRPC5 functions in distinct neuronal populations within the hypothalamus to regulate fundamental innate behaviors including feeding, anxiety responses (flight/fight/fear), socialization, and maternal care. The protein is localized to the cell membrane as a multi-pass membrane protein, consistent with its role as an ion channel. The selected fragment (residues 1-363) represents a stable, soluble unit optimized for structural and biochemical investigations.