Recombinant STAC protein (His tag)

Catalog Number	548060
Synonyms	Src homology 3 and cysteine-rich domain-containing protein
Species	Human
Expression System	E. coli
Accession	Q99469
Molecular Weight	Predictes a molecular mass of 15.05 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	288-402
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 288-402 aa (Q99469) 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 STAC Protein Fragment (aa 288-402) – a high-purity, functional fragment encompassing the SH3 2 domain, designed for studying calcium channel regulation and membrane expression mechanisms in cellular and biochemical assays. The full-length SH3 and cysteine-rich domain-containing protein (STAC) in Homo sapiens promotes the expression of ion channels such as CACNA1H at the cell membrane, thereby regulating channel activity. It also plays a minor role in enhancing CACNA1S membrane expression and slows the inactivation rate of CACNA1C calcium channels. STAC is localized in the cytoplasm, cytosol, and as a peripheral membrane protein on the cytoplasmic side of the cell membrane and sarcolemma, indicating its involvement in membrane-associated signaling and channel modulation processes.