Recombinant STAC2 protein (His tag)

Catalog Number	542958
Synonyms	24b2/STAC2; Src homology 3 and cysteine-rich domain-containing protein 2
Species	Human
Expression System	E. coli
Accession	Q6ZMT1
Molecular Weight	Predictes a molecular mass of 14.72 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	296-411
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 296-411 aa (Q6ZMT1) 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 SH3 and cysteine-rich domain-containing protein 2 (STAC2) fragment (aa 296-411) is a high-purity, functional protein designed for studying the SH3 2 domain. This fragment serves as an essential tool for investigating calcium channel regulation and membrane expression mechanisms in human cellular systems. The full-length STAC2 protein, encoded by the STAC2 gene in Homo sapiens, plays a critical role in calcium channel regulation by promoting the expression of CACNA1S at the cell membrane and enhancing channel activity. It also modulates calcium channel CACNA1C by slowing its inactivation rate. STAC2 localizes to the cytoplasm, cytosol, and cell membrane (including sarcolemma), functioning as a peripheral membrane protein on the cytoplasmic side. It notably colocalizes with CACNA1C at the plasma membrane, underscoring its importance in calcium signaling pathways and membrane channel dynamics.