Recombinant NECA2 protein (His tag)

Catalog Number	540612
Synonyms	EF-hand calcium-binding protein 2; Neuronal calcium-binding protein 2; Synaptotagmin-interacting protein 2; Stip-2
Species	Human
Expression System	E. coli
Accession	Q7Z6G3
Molecular Weight	Predictes a molecular mass of 17.76 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	248-386
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 248-386 aa (Q7Z6G3) 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 NECAB2 (N-terminal EF-hand calcium-binding protein 2) Fragment (aa 248-386). This high-purity protein fragment is designed to encompass the ABM domain, offering researchers a precise tool to investigate calcium-sensing signaling mechanisms, receptor interactions, and scaffold functions in neuronal and cellular studies. NECAB2, or N-terminal EF-hand calcium-binding protein 2, functions as a signaling scaffold protein that senses intracellular calcium levels. It modulates ligand-induced internalization of ADORA2A and the coupling efficiency of mGluR5/GRM5, thereby regulating signaling pathways such as MAPK1/3 (ERK1/2) activation. The protein localizes to the cytoplasm, cell membrane, and neuronal projections including dendrites and axons, where it colocalizes with ADORA2A and mGluR5/GRM5 at postsynaptic and presynaptic sites. This fragment (aa 248-386) includes the ABM domain, enabling focused studies on domain-specific roles in calcium-mediated signaling and receptor modulation.