Recombinant GRDN protein (His tag)

Catalog Number	542787
Synonyms	Akt phosphorylation enhancer; APE; Coiled-coil domain-containing protein 88A; G alpha-interacting vesicle-associated protein; GIV; Girders of actin filament; Hook-related protein 1; HkRP1
Species	Human
Expression System	E. coli
Accession	Q3V6T2
Molecular Weight	Predictes a molecular mass of 26.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	1-217
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 1-217 aa (Q3V6T2) 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	Introducing the recombinant Girdin (CCDC88A) Calponin-homology (CH) domain fragment (amino acids 1-217), a high-purity human protein tool designed for investigating cytoskeletal regulation and G-protein signaling pathways. This fragment provides researchers with a targeted reagent to study the specific functions of the CH domain in actin dynamics, cell migration, and structural biology applications. Girdin (CCDC88A) is a multifunctional human protein that serves as a key regulator of cellular migration and cytoskeletal organization. As a bifunctional G-protein modulator, it acts as both a guanine nucleotide exchange factor for G(i) alpha subunits and a guanine nucleotide dissociation inhibitor for G(s) subunit alpha GNAS. The full-length protein is essential for EGFR signaling retention at the cell membrane, enhances AKT1 phosphorylation and kinase activity through PI3K-dependent mechanisms, and plays crucial roles in neuronal integration during adult neurogenesis via AKT-mTOR pathway modulation. Girdin localizes to multiple cellular compartments including the cell membrane, cytosol, cytoplasmic vesicles, lamellipodia, and centrosomal structures, with EGF stimulation promoting membrane translocation and activation of its guanine nucleotide exchange factor activity. The protein is also involved in ciliogenesis and cilium morphology regulation through interactions with cytoskeletal components.