Recombinant DAPLE protein (His tag)

Catalog Number	543785
Synonyms	Coiled-coil domain-containing protein 88C; Dvl-associating protein with a high frequency of leucine residues; hDaple; Hook-related protein 2; HkRP2
Species	Human
Expression System	E. coli
Accession	Q9P219
Molecular Weight	Predictes a molecular mass of 51.49 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 60 kDa band.

Product Information

Sequence Region	1-430
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 1-430 aa (Q9P219) 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 Protein Daple (CCDC88C) Fragment (aa 1-430) - A high-quality recombinant protein encompassing the Calponin-homology (CH) domain, designed for studying domain-specific functions in Wnt signaling pathways and G-protein activation mechanisms. Protein Daple (CCDC88C) is a crucial regulatory protein in human cells that functions as a key mediator in non-canonical Wnt signaling pathways. It activates guanine nucleotide-binding proteins (G-proteins) by serving as a non-receptor guanine nucleotide exchange factor, specifically binding to Gi-alpha subunits. This activation displaces beta and gamma subunits from heterotrimeric G-protein complexes, triggering downstream responses including RAC1 and PI3K-AKT signaling activation. Additionally, Protein Daple binds to Wnt receptor FZD7, displacing DVL1 and inhibiting canonical Wnt signaling. The protein also promotes apical constriction of cells through ARHGEF18 interaction. Subcellular localization studies show Protein Daple is primarily cytoplasmic and enriched at apical cell junctions, highlighting its role in cellular architecture and signaling complexes.