Recombinant C2D2A protein (His tag)

Catalog Number	548432
Species	Human
Expression System	E. coli
Accession	Q9P2K1
Molecular Weight	Predictes a molecular mass of 49.24 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	404-817
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 404-817 aa (Q9P2K1) 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 CC2D2A protein fragment (amino acids 404-817), a high-quality tool designed for studying the structural and functional aspects of the Coiled-coil and C2 domain-containing protein 2A. This fragment, derived from human CC2D2A, is engineered for stability and solubility, making it ideal for biochemical assays, structural analysis, and ciliary biology research. The full-length Coiled-coil and C2 domain-containing protein 2A (CC2D2A) is a component of the tectonic-like complex, which localizes at the transition zone of primary cilia. This complex functions as a selective barrier, regulating the diffusion of transmembrane proteins between the ciliary membrane and the plasma membrane. CC2D2A is essential for ciliogenesis and plays a critical role in sonic hedgehog (SHH) signaling pathways, as supported by experimental evidence. The protein is primarily located in the cytoplasm and specifically associates with the cilium basal body, highlighting its importance in cellular processes related to cilia formation and function.