Recombinant FUZZY protein (His tag)

Catalog Number	545816
Species	Human
Expression System	E. coli
Accession	Q9BT04
Molecular Weight	Predictes a molecular mass of 47.34 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

Product Information

Sequence Region	1-418
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 1-418 aa (Q9BT04) 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 Protein fuzzy homolog (FUZ) fragment (1-418) is a high-quality, soluble protein designed for structural and functional studies. This fragment represents a stable domain of the human FUZ protein, essential for cilium biogenesis and planar cell polarity, making it an ideal tool for investigating ciliogenesis mechanisms and related cellular processes. Protein fuzzy homolog (FUZ) is a key effector in planar cell polarity and cilium biogenesis, playing a critical role in regulating protein and membrane transport to the cilium. As a core component of the CPLANE complex, it facilitates the recruitment of peripheral IFT-A proteins to basal bodies, which is vital for proper ciliogenesis and hair follicle morphogenesis. The protein also exhibits binding affinity for phosphatidylinositol phosphates, particularly phosphatidylinositol 3-phosphate. Subcellular localization studies indicate that FUZ is primarily found in the cytoplasm, cytoskeleton, and cilium basal body, underscoring its involvement in cytoskeletal organization and ciliary function. This recombinant fragment encompasses the full-length domain (1-418), selected for stability and solubility to support biochemical and structural research.