Recombinant DZIP1 protein (His tag)

Catalog Number	543069
Synonyms	DAZ-interacting protein 1/2; DAZ-interacting zinc finger protein 1
Species	Human
Expression System	E. coli
Accession	Q86YF9
Molecular Weight	Predictes a molecular mass of 47.72 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	57-443
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 57-443 aa (Q86YF9) 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 Cilium assembly protein DZIP1 (DAZ-interacting protein 1/2) fragment (amino acids 57-443), a highly stable and soluble unit ideal for investigating ciliogenesis, basal body function, and Hedgehog signaling pathways. This fragment is expertly designed for structural and biochemical studies, offering researchers a reliable tool to explore the molecular mechanisms of cilium assembly and related cellular processes. Cilium assembly protein DZIP1 (DAZ-interacting protein 1/2) is a molecular adapter crucial for cilium assembly and function, primarily localizing to the cilium basal body, centrosome, centriolar satellites, and nucleus in human cells. It recruits and activates RAB8A to facilitate vesicle-mediated transport to the cilium, bridges the BBSome complex to PCM1 for cilium biogenesis, and is essential for assembling the intraflagellar transport machinery and ciliary appendage proteins like CEP164 and NINEIN. Beyond ciliogenesis, DZIP1 regulates Hedgehog signaling by potentially retaining GLI3 in the cytoplasm and plays vital roles in spermatogenesis by organizing the basal body and sperm flagellum assembly, as well as in heart development through its ciliogenesis functions. This protein's dynamic subcellular localization underscores its importance in cellular organization and signaling pathways.