Recombinant FMN1 protein (His tag)

Catalog Number	542877
Synonyms	Limb deformity protein homolog
Species	Human
Expression System	E. coli
Accession	Q68DA7
Molecular Weight	Predictes a molecular mass of 53.71 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 59 kDa band.

Product Information

Sequence Region	974-1419
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 974-1419 aa (Q68DA7) 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	This product is a recombinant fragment of human Formin-1 (Limb deformity protein homolog), corresponding to residues 974-1419. This 446-amino acid fragment was selected for its stability and solubility, making it ideal for structural studies and biochemical assays investigating actin polymerization and cell junction formation. Formin-1, encoded by the FMN1 gene, plays a critical role in the formation of adherens junctions and the polymerization of linear actin cables. The full-length protein localizes to the nucleus, cytoplasm, and cell membrane, specifically at adherens junctions, where it functions as a peripheral membrane protein on the cytoplasmic side. Its localization to these junctions is dependent on alpha-catenin, and it also associates with F-actin bundles and microtubules, underscoring its importance in cytoskeletal organization and cell adhesion processes.