Recombinant PROF3 protein (His tag)

Catalog Number	551119
Synonyms	Profilin III
Species	Human
Expression System	E. coli
Accession	P60673
Molecular Weight	Predictes a molecular mass of 16.25 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	1-137
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 1-137 aa (P60673) 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 Profilin-3 (PFN3) Fragment (1-137) is a high-purity protein designed for structural and biochemical studies. This fragment captures the essential actin-binding and poly-L-proline interaction domains, offering a stable and soluble unit ideal for investigating cytoskeletal dynamics and signaling pathways. Profilin-3 (PFN3) is a human protein that binds to actin and modulates cytoskeleton structure by slightly reducing actin polymerization. It also interacts with poly-L-proline and phosphoinositides, including PtdIns(3)P, PtdIns(4,5)P2, and PtdIns(4)P, suggesting roles in membrane signaling and intracellular trafficking. Localized to both the cytoplasm (associated with the cytoskeleton) and nucleus, Profilin-3 is implicated in cellular processes such as spermatogenesis. Its functions make it a key target for research in cell biology, development, and disease mechanisms.