Recombinant ACT3 protein (His tag)

Catalog Number	532680
Species	Drosophila melanogaster
Expression System	E. coli
Accession	P53501
Gene ID	37368
Molecular Weight	Predictes a molecular mass of 43.26 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	3-376
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 3-376 aa (P53501) 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 Actin-57B (EC 3.6.4.-) fragment (residues 3-376) from Drosophila melanogaster, offering a stable and soluble unit ideal for investigating cytoskeletal dynamics, cell motility, and muscle contraction mechanisms in structural and biochemical studies. Actins are highly conserved proteins essential for diverse cellular processes, including cytoskeleton organization, cell motility, chromosome segregation, and muscle contraction, and are expressed ubiquitously in eukaryotic cells. In Drosophila melanogaster, Actin-57B localizes to the cytoplasm and cytoskeleton, where it associates with spectrosomes during cystocyte proliferation and differentiation and forms part of the inner rim of ring canals in nurse cells and oocytes during oogenesis, highlighting its critical role in cellular structure and developmental processes.