Recombinant ACTS protein (His tag)

Catalog Number	540117
Synonyms	Alpha-actin-1
Species	Human
Expression System	E. coli
Accession	P68133
Molecular Weight	Predictes a molecular mass of 43.58 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	2-377
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 2-377 aa (P68133) 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 Actin, alpha skeletal muscle (ACTA1) fragment (residues 2-377) is a highly purified protein preparation ideal for structural biology and biochemical studies. This 376-amino acid fragment represents a stable and soluble unit of actin, optimized for research applications requiring reliable protein function and integrity. Actins are highly conserved proteins involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. As a cytoskeletal protein located in the cytoplasm and cytoskeleton, alpha skeletal muscle actin plays crucial roles in muscle contraction, cell division, and intracellular transport mechanisms. The protein's conserved nature across species makes it a fundamental component for studying cellular motility and cytoskeletal dynamics in multiple biological contexts.