Recombinant MYPC2 protein (His tag)

Catalog Number	544976
Synonyms	Fast MyBP-C; C-protein, skeletal muscle fast isoform
Species	Human
Expression System	E. coli
Accession	Q14324
Molecular Weight	Predictes a molecular mass of 13.00 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	52-154
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 52-154 aa (Q14324) 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 Fast Myosin-binding protein C (Fast MyBP-C) fragment (residues 52-154) is a high-purity, stable protein designed for structural and biochemical studies. This fragment, derived from the MYBPC2 gene, represents a soluble and well-folded region ideal for investigating the molecular mechanisms of muscle contraction and regulation. Fast Myosin-binding protein C (Fast MyBP-C) is a thick filament-associated protein located in the crossbridge region of vertebrate striated muscle A bands. It binds to myosin heavy chain (MHC), F-actin, and native thin filaments in vitro, and modulates actin-activated myosin ATPase activity. This protein is implicated in fine-tuning muscle contraction dynamics or serving a structural role in sarcomere organization, highlighting its importance in muscle physiology and potential relevance to myopathies.