Recombinant MLRA protein (His tag)

Catalog Number	540160
Synonyms	MLC-2a; MLC2a; Myosin light chain 2a; Myosin regulatory light chain 7
Species	Human
Expression System	E. coli
Accession	Q01449
Molecular Weight	Predictes a molecular mass of 20.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	2-175
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 2-175 aa (Q01449) 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 Myosin regulatory light chain 2, atrial isoform (MLC-2a) fragment (amino acids 2-175) is a high-quality protein preparation designed for studying the specific functions of the EF-hand domains. This 174-amino acid fragment fully encompasses EF-hand 1, EF-hand 2, and EF-hand 3 domains, making it an ideal tool for calcium-binding studies and myosin regulatory mechanisms research. Myosin regulatory light chain 2, atrial isoform (MLC-2a), encoded by the MYL7 gene, is a key regulatory component of myosin in cardiac muscle. While specific functional details and subcellular localization information are not provided in the available data, this protein plays a crucial role in muscle contraction regulation through its calcium-binding EF-hand domains. The atrial-specific isoform suggests specialized functions in cardiac atrial tissue, making it particularly relevant for cardiovascular research and cardiac muscle physiology studies.