Recombinant LMOD2 protein (His tag)

Catalog Number	545216
Synonyms	Cardiac leiomodin; C-LMOD; Leiomodin
Species	Human
Expression System	E. coli
Accession	Q6P5Q4
Molecular Weight	Predictes a molecular mass of 11.60 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	461-547
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 461-547 aa (Q6P5Q4) 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 Leiomodin-2 (LMOD2) Fragment (461-547): A high-purity human protein fragment engineered to encompass the functional WH2 domain, ideal for investigating actin nucleation and polymerization mechanisms in cardiac research. Leiomodin-2 (LMOD2) is a human protein critical for actin filament nucleation and polymerization, directly regulating actin filament length and sarcomere organization in cardiac muscle. It localizes to the cytoplasm, myofibril, sarcomere (particularly the M line), and cytoskeleton, where it colocalizes with actin filaments. This protein is essential for normal heart function, as demonstrated by its role in maintaining sarcomere structure and cardiac performance. The provided fragment (461-547) includes the WH2 domain, enabling focused studies on actin-binding and polymerization activities without interference from other regions of the full-length protein.