Recombinant MYOM2 protein (His tag)

Catalog Number	537837
Synonyms	165 kDa connectin-associated protein; 165 kDa titin-associated protein; M-protein; Myomesin family member 2
Species	Human
Expression System	E. coli
Accession	P54296
Molecular Weight	Predictes a molecular mass of 38.35 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	152-478
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 152-478 aa (P54296) 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 Myomesin-2 Fragment (aa 152-478) is a high-purity protein designed for studying the structural and functional roles of the Ig-like C2-type domains in sarcomere organization. This 327-amino acid fragment fully encompasses two key immunoglobulin-like domains, making it an essential tool for investigating myofibrillar M-band assembly and protein interactions. Myomesin-2 is a major component of the vertebrate myofibrillar M band, where it plays a critical role in sarcomere organization and stability. The full-length protein demonstrates dose-dependent binding to key myofibrillar components including myosin, titin, and light meromyosin, contributing to the structural integrity of the contractile apparatus. Located specifically in the cytoplasm within myofibril sarcomeres at the M line, Myomesin-2 serves as a crucial structural scaffold in muscle tissue. The selected fragment (aa 152-478) contains two complete Ig-like C2-type domains (154-245 and 266-371), which are instrumental for mediating protein-protein interactions within the M-band complex.