

## Product datasheet for **TP501346**

### **MyI2 (NM\_010861) Mouse Recombinant Protein**

#### **Product data:**

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse myosin, light polypeptide 2, regulatory, cardiac, slow (MyI2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR201346 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)
	 MAPKKAKKRIEGGSSNVFSMFEQTQIQEFKEAFTIMDQNRDGFIDKNDLRDTFAALGRVNVKNEEIDEMI KEAPGPINFTVFLTMFGEKLGADPEETILNAFKVFDPEGKGLKADYVREMLTTQAGRFSKEEIDQMFA AFPPDVTGNLDYKNLVHIITHGEEKD  <b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b>
Tag:	C-MYC/DDK
Predicted MW:	18.8 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u><a href="#">NP_034991</a></u>
Locus ID:	17906
UniProt ID:	<u><a href="#">P51667</a></u>
RefSeq Size:	633
Cytogenetics:	5 F



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RefSeq ORF: 501

Synonyms: MLC-2; MLC-2s/v; MLC-2v; Mlc2v; Mylpc

**Summary:** Contractile protein that plays a role in heart development and function (PubMed:10409661). Following phosphorylation, plays a role in cross-bridge cycling kinetics and cardiac muscle contraction by increasing myosin lever arm stiffness and promoting myosin head diffusion; as a consequence of the increase in maximum contraction force and calcium sensitivity of contraction force. These events altogether slow down myosin kinetics and prolong duty cycle resulting in accumulated myosins being cooperatively recruited to actin binding sites to sustain thin filament activation as a means to fine-tune myofilament calcium sensitivity to force (By similarity) (PubMed:22426213, PubMed:16908724, PubMed:10409661). During cardiogenesis plays an early role in cardiac contractility by promoting cardiac myofibril assembly (PubMed:9422794).[UniProtKB/Swiss-Prot Function]

### Product images:



Purified recombinant protein Myl2 was analyzed by SDS-PAGE gel and Coomassie Blue Staining.