

## Product datasheet for **SC303380**

### MYOM1 (NM\_003803) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MYOM1 (NM_003803) Human Untagged Clone
Tag:	Tag Free
Symbol:	MYOM1
Synonyms:	SKELEMIN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC303380 representing NM_003803. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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<b>Restriction Sites:</b>	Sgfl-Mlul
<b>ACCN:</b>	NM_003803
<b>Insert Size:</b>	5058 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_003803.3</a></u>
<b>RefSeq Size:</b>	5848 bp
<b>RefSeq ORF:</b>	5058 bp
<b>Locus ID:</b>	8736
<b>UniProt ID:</b>	<u><a href="#">P52179</a></u>
<b>Cytogenetics:</b>	18p11.31
<b>MW:</b>	187.6 kDa

**Gene Summary:**

The giant protein titin, together with its associated proteins, interconnects the major structure of sarcomeres, the M bands and Z discs. The C-terminal end of the titin string extends into the M line, where it binds tightly to M-band constituents of apparent molecular masses of 190 kD (myomesin 1) and 165 kD (myomesin 2). This protein, myomesin 1, like myomesin 2, titin, and other myofibrillar proteins contains structural modules with strong homology to either fibronectin type III (motif I) or immunoglobulin C2 (motif II) domains. Myomesin 1 and myomesin 2 each have a unique N-terminal region followed by 12 modules of motif I or motif II, in the arrangement II-II-I-I-I-I-I-I-II-II-II-II. The two proteins share 50% sequence identity in this repeat-containing region. The head structure formed by these 2 proteins on one end of the titin string extends into the center of the M band. The integrating structure of the sarcomere arises from muscle-specific members of the superfamily of immunoglobulin-like proteins. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (1) represents the longer transcript, and encodes the longer isoform (a).