

## Product datasheet for **SC308267**

### MYBPC1 (NM\_206820) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MYBPC1 (NM_206820) Human Untagged Clone
Tag:	Tag Free
Symbol:	MYBPC1
Synonyms:	LCCS4; MYBPCC; MYBPCS; MYOTREM; ssMyBP-C
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_206820, the custom clone sequence may differ by one or more nucleotides

```

ATGCCAGAACCCACTAAGAAAGAGGAAAATGAAGTGCCAGCCCCAGCCCCACCCCGGAA
GAACCAAGTAAAGAGAAGGAGGCCGGAACACTACCCAGCAAAAGACTGGACCCTTGTGAA
ACTCCTCTGGGGAGGAACAAGCCAAGCAGAATGCCAACTCCCAGCTGTCCATCTTGTT
ATTGAAAAACCTCAAGGAGGAACAGTGAAAGTTGGTGAAGATACACCTTCATAGCCAAA
GTCAAGGCTGAAGATCTTCTGAGAAAACCCACTATCAAATGGTTCAAAGGAAAATGGATG
GACCTGGCCAGCAAAGCCGGGAAGCACCTTCAGCTGAAGGAAACCTTTGAGAGGCACAGT
CGGGTGTACACATTTGAGATGCAGATCATCAAGGCCAAAGATAACTTTGCAGGAAATTAC
AGATGCGAGGTACCTATAAGGATAAGTTTGACAGCTGTTCAATTTGATCTTGAAGTGCAC
GAATCTACTGGGACTACTCCAAACATTGACATCAGATCTGCTTTCAAGAGAAGTGGAGAA
GGTCAAGAGGATGCAGGAGAAGTGGACTTTAGTGGTCTCCTGAAACGTAGGGAGGTGAAG
CAGCAGGAGGAAGAACCCAGGTGGACGTATGGGAGTTGCTGAAGAACCGGAAACCCAGT
GAGTACGAGAAGATCGCCTTCCAGTATGGAATCACCGACCTGCGCGGCATGCTCAAGCGA
CTCAAGCGCATGCGCAGAGAGGAGAAGAAGAGCGCAGCTTTTGCAAAAAATCTTGATCCT
GCATATCAGGTTGACAAAGGAGGCAGAGTGAGGTTTGTGTGGAGCTGGCAGATCCAAAG
TTGGAGGTGAAATGGTATAAAAAATGGTCAAGAAATTCGACCCAGTACCAAATACATCTTT
GAACACAAAGGATGCCAGAGAATCCTGTTTATCAATAACTGTCAGATGACAGATGATTCA
GAGTATTATGTGACAGCCGGTGTGAGAAATGTTCCACTGAGCTTTCGTAAAGAGAGCCT
CCAATTATGGTGACCAAACAGCTGGAAGATACAACCTGCTTATTGTGGGAGAGAGTGAA
TTAGAATGTGAGGTGTCTGAAGATGATGCCAATGTAAAATGGTTTAAGAAATGGTGAAGAG
ATTATCCCTGGTCCAAAATCAAGATACCGAATTAGAGTTGAGGGTAAAAAACACATCTTG
ATCATAGAGGGAGCAACAAAGGCTGATGCTGCAGAAATTCAGTAATGACAACAGGAGGA
CAATCATCTGCTAACTTAGTGTGACTTGAAACCTCTGAAGATTTTGACACCTCTGACT
GATCAGACTGTAAATCTTGAAAAGAAAATCTGCCTGAAGTGTGAAATCTCTGAAAACATA
CCAGGAAAATGGACTAAAATGGCTACCTGTTTACAGGAGAGTGACCGTCTAAAGGTGGTT
CACAAGGGAAGGATCCACAAGTTAGTGATAGCCAATGCCCTCACTGAAGATGAAGGTGAT
TATGTATTTGCACCTGATGCCTACAATGTTACTCTGCCTGCCAAAGTTTATGTTATTGAT
CCTCCTAAGATCATCCTGGATGGTCTTGATGCTGACAACACAGTGACAGTGATTGCGAGGA
AACAAAGCTTCGTCTTGAGATCCCCATCAGCGGAGAACACCTCCTAAAGCCATGTGGAGC
CGGGGAGATAAGGCTATTATGGAAGGCAGTGGCCGGATAAGAACAGAATCTTACCCTGAT

```



[View online »](#)

AGCAGCACTCTGGTCATTGATATAGCTGAAAGAGATGACTCTGGTGTACCACATCAAT  
 CTGAAAAACGAAGCTGGAGAGGCACATGCAAGCATCAAGGTTAAAGTTGTGGACTTCCCT  
 GATCCTCCAGTGGCACCAGCTGTGACAGAGGTGGGAGATGACTGGTGTATCATGAACTGG  
 GAGCCTCTGCCTACGACGGAGGCTCTCCAATCCTAGGATATTTTATTGAGAGGAAGAAG  
 AAACAAAGCTCCAGGTGGATGAGGCTGAATTTTGTCTCTGCAAAGAAACAACCTTTTGG  
 CCCAAGAAGATGATTGAAGGTGTGGCCTATGAGGTCCGCATCTTGCAGTCAATGCCATT  
 GGCACTCCAAGCCCAGTATGCCCTCCAGGCCTTTTGTCTTTGGCTGTAACAAGCCCT  
 CCTACTCTTCTGACTGTGGACTCTGTCACTGACACGACTGTACAGATGAGGTGGCGCCCC  
 CCAGACCACATTGGTGCAGCAGGTTTAGATGGCTATGTGCTAGAGTATTGCTTTGAAGGA  
 AGTACATCAGCAAAACAGTCTGATGAAAATGGGGAGGCTGCCTATGATCTGCCAGCTGAG  
 GACTGGATAGTTGCAAAACAAAGATCTGATTGACAAGACGAAGTTCACCATCACAGGTCTG  
 CCAACAGATGCAAAAGATCTTTGTGCGTGTGAAGGCTGTTAATGCAGCTGGTGCCAGCGAG  
 CCCAAGTACTATTCTCAGCCATTCTCGTGAAGGAAATCATAGAACCTCCAAAGATTCCG  
 ATTCAAAGACACCTGAAGCAAACCTATATCCGCAGAGTTGGAGAAGCTGTCAATCTGGTT  
 ATACCTTTCCAGGGAAAACCAAGACCAGAATTAACCTTGAAGAAGGATGGTGCAGAAATT  
 GATAAGAATCAAATAAACATTCCGAACTCTGAGACTGATACAATCATATTTATTAGAAAA  
 GCAGAGAGGAGCCACTCTGGGAAATATGATCTGCAAGTCAAAGTGACAAATTCGTGGAG  
 ACCGCATCAATTGACATCCAGATCATTGACCGTCCAGGTCCACCCCAAATTTGTGAAGATT  
 GAGGATGTCTGGGGAGAAAAATGTCGCTCTCACATGGACTCCACCAAAGGATGATGGAAAT  
 GCTGCTATCACAGGCTATACCATTGAGAAGGCTGACAAGAAGAGCATGGAATGGTTTACT  
 GTCATTGAGCATTATCATCGAACAGTCCACCATTACTGAATTGGTCATAGGGAATGAA  
 TATTACTTCCGGGTCTTTTCTGAAAACATGTGTGGCCTCAGTGAAGGATGCCACCATGACT  
 AAAGAGAGTGCAGTGCAGCCAGGATGGTAAAACTACAAAAATCCAGTGTATGAAGAC  
 TTTGATTTCTCAGAGGCACCCATGTTTACTCAGCCTTTGGTTAACACCTATGCCATAGCT  
 GTTACAATGCCACCCTAAACTGCAAGTGTGAGAGGAAATCCTAACCTAAAATAACCTGG  
 ATGAAAAACAAAGTTGCTATTGTGGATGATCCAAGATACAGGATGTTTCCAGCAACCAGGGA  
 GTCTGTACCCTGGAAATTCGCAAGCCCAGCCCTATGATGGAGGCACTTACTGTGCTGCAA  
 GCAGTCAATGACCTTGGGACAGTGGAGATTGAATGCAAACCTGGAGGTGAAAGTCATTGCA  
 CAATAA

- Restriction Sites:** Please inquire
- ACCN:** NM\_206820
- OTI Disclaimer:** 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).
- OTI Annotation:** 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.
- Components:** 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).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

**RefSeq:** [NM\\_206820.1](#), [NP\\_996556.1](#)

**RefSeq Size:** 3858 bp

**RefSeq ORF:** 3426 bp

**Locus ID:** 4604

**UniProt ID:** [Q00872](#)

**Cytogenetics:** 12q23.2

**Gene Summary:** This gene encodes a member of the myosin-binding protein C family. Myosin-binding protein C family members are myosin-associated proteins found in the cross-bridge-bearing zone (C region) of A bands in striated muscle. The encoded protein is the slow skeletal muscle isoform of myosin-binding protein C and plays an important role in muscle contraction by recruiting muscle-type creatine kinase to myosin filaments. Mutations in this gene are associated with distal arthrogryposis type I. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Dec 2011]  
Transcript Variant: This variant (3) lacks three exons and includes an alternate exon in the coding region, compared to variant 1. The encoded isoform (3) is shorter and has a distinct C-terminus, compared to isoform 1.