

## Product datasheet for **RG214729**

### MYBPC1 (NM\_206819) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MYBPC1 (NM_206819) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MYBPC1
Synonyms:	LCCS4; MYBPCC; MYBPCS; MYOTREM; ssMyBP-C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG214729 representing NM_206819 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG214729 representing NM\_206819  
Red=Cloning site Green=Tags(s)

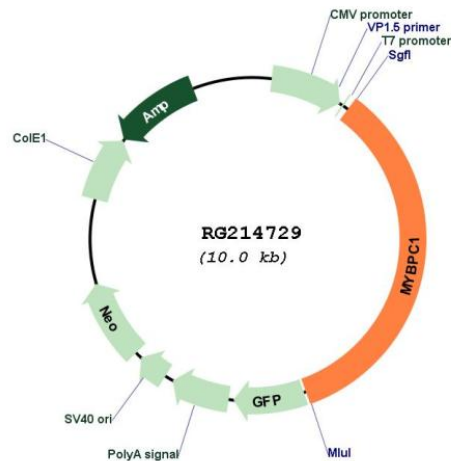
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 KSMWFVTVIEHYHRTSATITELVIGNEYFRVFSNMCGLSEDATMTKESAVIARDGKIYKNPVYEDFDF  
 SEAPMFTQPLVNTYAIAGYNATLNCVSRGNPKPKITWMKNKVAIVDDPRYRMFSNQGVCSTLEIRKPSPYD  
 GGTYYCKAVNDLGTVEIECKLEVAVIAQ

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI  
**Cloning Scheme:**



## Plasmid Map:



ACCN: NM\_206819

ORF Size: 3444 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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\\_206819.2](#), [NP\\_996555.1](#)

RefSeq Size: 3935 bp

RefSeq ORF: 3447 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]