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Product datasheet for RC220058

MYBPC2 (NM_004533) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MYBPC2 (NM_004533) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MYBPC2
Synonyms:	fsMyBP-C; MYBPC; MYBPCF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC220058 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCTGAGGCAAAACCAGCGGCCAAAAAGGCCCCCAAAGGCAAAGATGCCCCCAAAGGAGCCCCCAAGG
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Protein Sequence:

>RC220058 protein sequence
Red=Cloning site Green=Tags(s)

MPEAKPAAKKAPKGKDAPKGAPKEAPPKEAPAEAPKEAPPEDQSPTAEEPTGVFLKKPDSVSVETGKDAV
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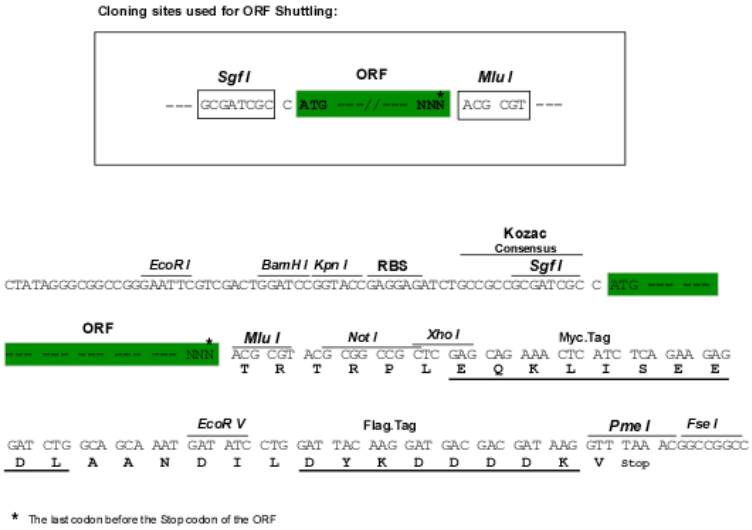
Chromatograms: https://cdn.origene.com/chromatograms/mk6677_b08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

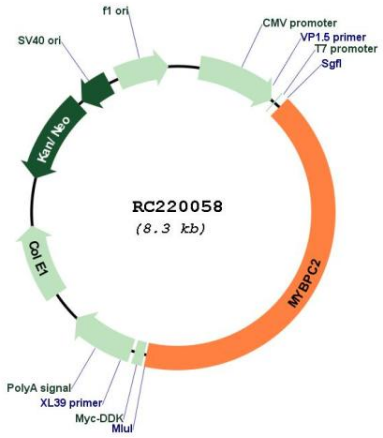


ACCN: NM_004533

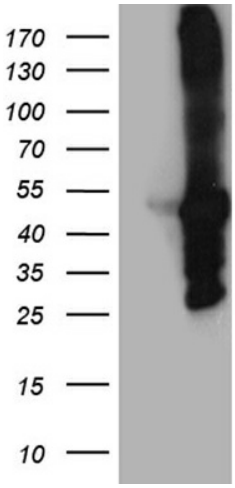
ORF Size: 3423 bp

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004533.4
RefSeq Size:	3598 bp
RefSeq ORF:	3426 bp
Locus ID:	4606
UniProt ID:	Q14324
Cytogenetics:	19q13.33
Domains:	ig, IGc2, IG, FN3
MW:	128.1 kDa
Gene Summary:	This gene encodes a member of the myosin-binding protein C family. This family includes the fast-, slow- and cardiac-type isoforms, each of which is a myosin-associated protein found in the cross-bridge-bearing zone (C region) of A bands in striated muscle. The protein encoded by this locus is referred to as the fast-type isoform. Mutations in the related but distinct genes encoding the slow-type and cardiac-type isoforms have been associated with distal arthrogryposis, type 1 and hypertrophic cardiomyopathy, respectively. [provided by RefSeq, Jul 2012]

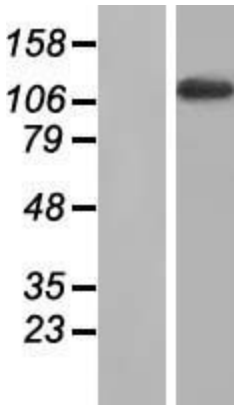
Product images:



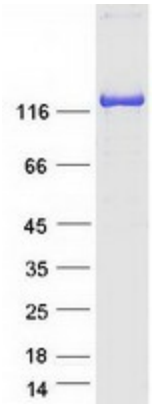
Circular map for RC220058



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MYBPC2 (Cat# RC220058, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MYBPC2 (Cat# [TA811203])(1:2000). Positive lysates [LY417926] (100ug) and [LC417926] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417926]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220058 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MYBPC2 protein (Cat# [TP320058]). The protein was produced from HEK293T cells transfected with MYBPC2 cDNA clone (Cat# RC220058) using MegaTran 2.0 (Cat# [TT210002]).