

## Product datasheet for RC214718

### HSPB2 (NM\_001541) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HSPB2 (NM\_001541) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** HSPB2  
**Synonyms:** Hs.78846; HSP27; LOH11CR1K; MKBP  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC214718 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGGATCGCC

ATGTCGGGCGCTCAGTGCCACATGCCACCCGGCCACCGCCGAGTACGAATTTGCCAACCCGAGCCGCC  
 TGGGTGAGCAGCGCTTCGGAGAAGGCCTCTGCCAGAAGAGATCTGACCCACACTCTACCATGGCTA  
 CTATGTCCGGCTCGGGCCGCCAGCTGGGGAGGGCAGCAGGGCAGGGGCTCCGAGCTTAGGCTCAGT  
 GAGGGCAAGTTCAGGCATTTCTGGATGTGAGCCACTTTACCCAGACGAGGTGACTGTGAGGACTGTGG  
 ATAACCTGCTGGAGGTGTCTGCCCGCACCCAGCGCCTGGACCGCCACGGCTTCGTGTCCCGAGAGTT  
 CTGCCGCACCTATGTCTGCCTGCTGATGTCGACCCCTGGCGAGTCCGAGCTGCTCTCCCATGATGGC  
 ATCTTAAACCTGGAAGCACCTCGGGGTGGCCGACATTTGGACACAGAGGTCAATGAGGTCTACATCTCCC  
 TGCTCCCTGCGCTCCTGATCCAGAGGAAGAGGAGGAGGCCAGCCATAGTTGAGCCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC214718 protein sequence  
 Red=Cloning site Green=Tags(s)

MSGRSVPHAHPTAEYEFANPSRLGEQRFGEGLLPEEIL TPTLYHGYYVRPRAAPAGEGSRAGASELRLS  
 EGKFAQFLDVSHFTPDEVTVRTVDNLLVESARHPQRLDRHGFVSREFCRTVYVLPADVDPWRVRAALSHDG  
 ILNLEAPRGRHLDTEVNEVYISLLPAPPDPEEEEEAAIVEP

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6460\\_a04.zip](https://cdn.origene.com/chromatograms/mk6460_a04.zip)



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001541

ORF Size: 546 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\\_001541.4](#)

RefSeq Size: 858 bp

RefSeq ORF: 549 bp

Locus ID: 3316

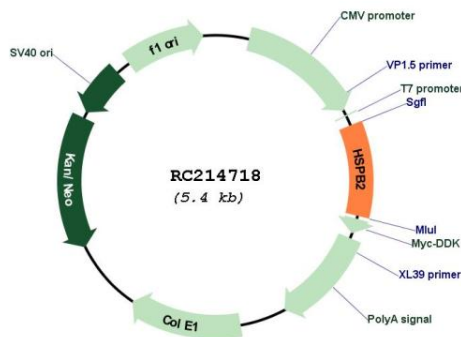
UniProt ID: [Q16082](#)

**Cytogenetics:** 11q23.1

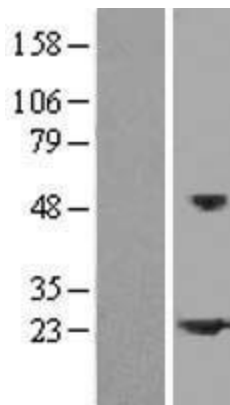
**MW:** 20.2 kDa

**Gene Summary:** The protein encoded by this gene belongs to the superfamily of small heat-shock proteins containing a conservative alpha-crystallin domain at the C-terminal part of the molecule. The protein is expressed preferentially in the heart and skeletal muscle. This protein regulates Myotonic Dystrophy Protein Kinase, which plays an important role in maintenance of muscle structure and function. [provided by RefSeq, Dec 2012]

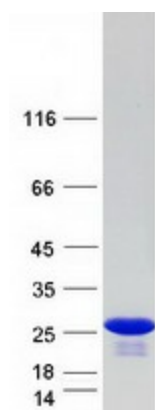
**Product images:**



Circular map for RC214718



Western blot validation of overexpression lysate (Cat# [LY419871]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214718 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HSPB2 protein (Cat# [TP314718]). The protein was produced from HEK293T cells transfected with HSPB2 cDNA clone (Cat# RC214718) using MegaTran 2.0 (Cat# [TT210002]).