

Product datasheet for **MG222204**

Hspb6 (NM_001012401) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Hspb6 (NM_001012401) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Hspb6
Synonyms: AA387366; Gm479; Hsp20
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG222204 representing NM_001012401
Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GGCGCGCC**

ATGGAGATCCCCGTGCCTGTGACGCTTCTTGGCTGCGCCGTGCTTCAGCTCCTTTACCAGGTTTCTCTG
CTCCGGGACGCTCTTTGACCAGCGTTTCGGCGAAGGGCTGCTTGAGGCAGAGCTGGCTTACTGTGCC
TGCTGCGATCGCCCCCTACTATCTGCGCGCCCCAGTGTGGCGTTACCCACAGCCAGGTGCCACGGAC
TCTGGGTATTTTCCGTGCTGCTGGATGTGAAGCACTTCTTGCCAGAGGAAATCTCTGTCAAGGTGGTTG
ACGACCATGTGGAGGTCCATGCTCGGCACGAGGAGCGCCCGGATGAACACGGATTCATTGCTCGAGAGTT
CCACCGCCGATACCGCCTGCCTCCTGGTGTGGACCCTGCTGCTGTGACCTCAGCACTGTCTCCTGAGGGT
GTCTGTCCATCCAGGCCACACCAGCGTCGGCCAGGCCAACTTCCGTCACCACCTGCTGCCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG222204 representing NM_001012401
Red=Cloning site Green=Tags(s)

MEIPVPVQPSWLRRASAPLPGFSAPGRLFDQRFGEGLLEAELASLCPAAIAPYYLRAPSVALPTAQVSTD
SGYFVSLLDVKHFLPEEISVKVVDHVEVHARHEERPDEHGFIAREFHRRYRLPPGVDPAAVTSALSPEG
VLSIQATPASAQAQLPSPPAK

TRTRPLE - GFP Tag - V

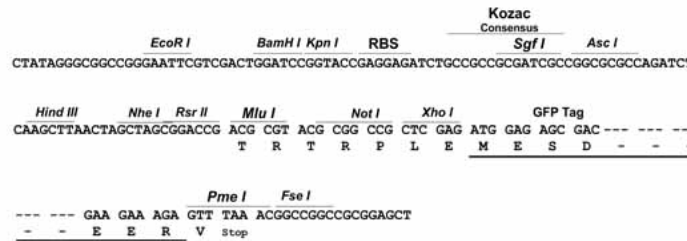
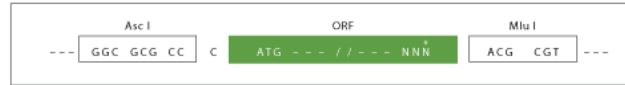
Restriction Sites: AscI-MluI



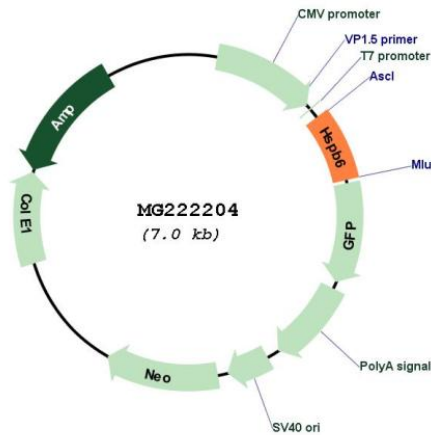
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Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001012401

ORF Size: 486 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:	<ol style="list-style-type: none">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:	<u>NM_001012401.3</u>
RefSeq Size:	1383 bp
RefSeq ORF:	489 bp
Locus ID:	243912
UniProt ID:	<u>Q5EBG6</u>
Cytogenetics:	7 B1
Gene Summary:	Small heat shock protein which functions as a molecular chaperone probably maintaining denatured proteins in a folding-competent state. Seems to have versatile functions in various biological processes. Plays a role in regulating muscle function such as smooth muscle vasorelaxation and cardiac myocyte contractility. May regulate myocardial angiogenesis implicating KDR. Overexpression mediates cardioprotection and angiogenesis after induced damage. Stabilizes monomeric YWHAZ thereby supporting YWHAZ chaperone-like activity. [UniProtKB/Swiss-Prot Function]