

Product datasheet for **SC116767**

HSP70-1B (HSPA1B) (NM_005346) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HSP70-1B (HSPA1B) (NM_005346) Human Untagged Clone
Tag:	Tag Free
Symbol:	HSP70-1B
Synonyms:	HSP70-1; HSP70-1B; HSP70-2; HSP70.1; HSP70.2; HSP72; HSPA1; HSX70
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_005346, the custom clone sequence may differ by one or more nucleotides

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ATGCCAAAGCCGCGCGATCGGCATCGACCTGGGCACCACCTACTCCTGCGTGGGGGTGTTCCAACACG
GCAAGGTGGAGATCATCGCCAACGACCAGGGCAACCCGACCACCCAGCTACGTGGCCTTACGGACAC
CGAGCGGCTCATCGGGGATCGGGCAAGAACCAGGTGGCGCTGAACCCGAGAACACCGTGTGACGCG
AAGCGGCTGATCGGCCGAAGTTCGGCGACCCGGTGGTGCAGTCGGACATGAAGCACTGGCCTTCCAGG
TGATCAACGACGAGACAAAGCCCAAGGTGCAGGTGAGCTACAAGGGGAGACCAAGGCATTCTACCCGA
GGAGATCTCGTCCATGGTGTGACCAAGATGAAGGAGATCGCCGAGGCGTACCTGGGCTACCCGGTGACC
AACGCGGTGATCACCGTCCCGCCTACTTCAACGACTCGCAGCGCCAGGCCACCAAGGATGCGGGTGTGA
TCGCGGGGCTCAACGTGCTGCGGATCATCAACGAGCCACGGCCGCCCATCGCTACGGCCTGGACAG
AACGGGAAGGGGAGCGCAACGTGCTCATCTTGACCTGGGCGGGGACCTTCGACGTGCCATCCTG
ACGATCGACGACGGCATCTTCGAGGTGAAGGCCACGGCCGGGACACCCACCTGGGTGGGAGGACTTTG
ACAACAGGCTGGTGAACCACTTCGTGGAGGAGTTCAAGAGAAAACAAGAAGGACATCAGCCAGAACA
GCGAGCCGTGAGGCGGCTGCGCACCCGCTGCGAGAGGGCCAAGAGGACCTGTCTCCAGCACCCAGGCC
AGCCTGGAGATCGACTCCCTGTTTGAGGGCATCGACTTCTACACGTCCATCACCAGGGCGAGGTTGAGG
AGCTGTGCTCCGACCTGTTCCGAAGCACCTGGAGCCCGTGGAGAAGGCTCTGCGCGACGCCAAGCTGGA
CAAGGCCCAGATTCACGACCTGGTCTGGTTCGGGGCTCCACCCGCATCCCAAGGTGCAGAAGTGTCTG
CAGGACTTCTTCAACGGGCGGACCTGAACAAGAGCATCAACCCGACGAGGCTGTGGCCTACGGGGCGG
CGGTGCAGGCGGCCATCCTGATGGGGACAAGTCCGAGAAGTGCAGGACCTGCTGCTGCTGGACGTGGC
TCCCTGTGCTGGGGCTGGAGACGGCCGAGGCGTGATGACTGCCCTGATCAAGCGCAACTCCACCATC
CCACCAAGCAGACGAGATCTTACCACCTACTCCGACAACAACCCGGGGTGTGATCCAGGTATCAG
AGGGCGAGAGGGCCATGACGAAAAGACAACAATCTGTTGGGGCGTTCGAGCTGAGCGGCATCCCTCCGGC
CCCCAGGGGCGTGCCCAAGATCGAGGTGACCTTCGACATCGATGCCAACGGCATCCTGAACGTACGGCC
ACGGACAAGAGCACCGGCAAGGCCAACAAGATCACCATCACAACGACAAGGGCCGCTGAGCAAGGAGG
AGATCGAGCGCATGGTGCAGGAGGCGGAGAAGTCAAAGCGGAGGACGAGGTGCAGCGGAGAGGGTGTG
AGCCAAGAAGCCCTGGAGTCTACGCTTCAACATGAAGAGCGCGTGGAGGATGAGGGGCTCAAGGGC
AAGATCAGCGAGGCGGACAAGAAGAAGTCTGGACAAGTGTCAAGAGGTATCTCGTGGCTGGACGCCA
ACACCTTGGCCGAGAAGGACGAGTTTGAACAAGAGGAGGAGTGGAGCAGGTGTGTAACCCCATCAT
CAGCGGACTGTACCAGGGTGCCGGTGGTCCCGGGCTGGCGGCTTCGGGGCTCAGGTTCCAAGGGAGG
TCTGGGTGAGCCCTACCATTGAGGAGGTGGATTAG
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_005346 unedited

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TCGATTTGTAAACGACTCCTATAGGCGGCCGGAATTCGGCACGAGGGCTGCTGCGACAG
TCCACTACCTTTTTTCGAGAGTGACTCCCCTTGTCCCAAGGCTTCCAGAGCGAACCTGTG
CGGCTGCAGGCACCGGCGCGTCGAGTTTTCCGGCTCCGGAAGGACCGAGCTCTTCTCGCG
GATCCAGTGTTCCGTTTTCCAGCCCTTTTTCTCAGAGCCGAGCCGACAGAGAGCAGGGAAC
CGGCATGGCCAAAGCCGCGCGATCGGCATCGACCTGGGCACCACCTACTCCTGCGTGGG
GGTGTTC AACACGGCAAGGTGGAGATCATCGCCAACGACCAGGGCAACCGCACCCACCC
CAGCTACGTGGCCTTACGGACACCGAGCGGCTCATCGGGGATGCGGCCAAGAACCAGGT
GGCGCTGAACCCGAGAACACCGTGTGTTGACGCGAAGCGGCTGATCGGCCGAAGTTCGG
CGACCCGGTGGTGCAGTCGGACATGAAGCACTGGCCTTCCAGGTGATCAACGACGGAGA
CAAGCCCAAGGTGCAGGTGAGCTACAAGGGGACACCAAGGCATTCTACCCTGAGGAGAT
CTCGTCCATGGTGTGACCAAGATGAAGGAGATCGCCGAGGCGTACCTGTGCTACCCCGT
GACCAACGCGGTGATCACCGTGCCGGCCTACTTCAACGACTCGCAGCGCCAGGCCCCAA
GGATGCGGGTGTGATCGCCGGGCTCAACGTGCTGCGGATCATCAACGAAGCCACGGCCGC
CGCCATCGCTACGGCCTGGACAGAACGGGCAAGGGGACCGCAACGTGCTCATCTTTGA
CCTGGGCGGAAGCACCTTACGTGTTTATTCTGACGATTGACAACGCATCTTCAAGGGG
AGGCCACGGCCGGGACCCACCTGGTGGGAGGACTTGAACACAGTCTGTAACCTTT
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_005346 unedited ACCACTTTTTCTGCCCGCCCGCTTTCTANGTCGAGTTTTTCTTTTTTTTTTTGAATT TTAAAGTTTATTTACTTTGAAGTAACCAACTTACCCATGGCCTGAGTTAAGTGTATTTAA AAGAAGAAATAGCCGTAAGATGGCAGTATAAATTCATCTCTGCATGTAGAAACCGGAAAA AAAGCAAGTTCAGTACTTACCAAAAAATTTCAACATTGCAAACACAGGAAATTGAGAAC TGACAAACAGAAATACTACGAAATGCAAAGTCTGAAGCTCCAAAACAAAAACAGCAATC TTGGAAAGGCCCTAATCTACCTCCTCAATGGTGGGGCCTGACCCAGACCCTCCCTTGCG ACCCTGAGCCCCGAAGCCCCAGGCCCGGACCACCGGGACCCTGGTACAGTTTCGCTGAT GATGGGCTTACACACCTGCTCCAGCTACTTCTCTCGCGCTCAAACCTCGACCTTCTCGGA CAAGGTATCCCCGTCCCCCACGATATGACCCCTTGCCACTCCGTGAGCATCTTCTTC TTGACGGCCTTCTGATCTTGCTCTTGAGTCCCTTCCCCTACCGGGCGCTCTTCTGCTG AAGGCGTAGGACTCCACGGCGCTTTCGTTTGAACCTTCCCGCTGTATACCCATCCCCC TTTGCCCTGCACGACCCCTGTCCATGCCTCGACCCCTCCTGTCAGGCCCTCCTCCCC GCACAGCCCTCCCTGGCCCTTCCGCCCTCCCGTCCGCCTCCTCCCCCGGATCCCCC CCTCCCTTCTCGGCTTCTCCTCCCGTGTCTACCCCGGGCTCCCGGCCCTCCCCC TCGTACGTCCCACCCCCC
Restriction Sites:	NotI-NotI
ACCN:	NM_005346
Insert Size:	2430 bp
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).
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_005346.3</u> , <u>NP_005337.1</u>
RefSeq Size:	2551 bp
RefSeq ORF:	1926 bp
Locus ID:	3304
UniProt ID:	<u>P08107</u>
Cytogenetics:	6p21.33
Domains:	HSP70
Protein Pathways:	Antigen processing and presentation, Endocytosis, MAPK signaling pathway, Spliceosome

Gene Summary:

This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. In conjunction with other heat shock proteins, this protein stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and in organelles. It is also involved in the ubiquitin-proteasome pathway through interaction with the AU-rich element RNA-binding protein 1. The gene is located in the major histocompatibility complex class III region, in a cluster with two closely related genes which encode similar proteins. [provided by RefSeq, Jul 2008]