

Product datasheet for **MR222671**

Hspd1 (NM_010477) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hspd1 (NM_010477) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hspd1
Synonyms:	60kDa; CPN60; HSP-60; HSP-65; Hsp60
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR222671 representing NM_010477
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTTCGACTACCCACAGTCCTTCGCCAGATGAGACCAGTGTCCTGGGCACTGGCTCCTCATCTCACTC
 GGGCCTATGCCAAAGATGTAAAATTTGGTGCGGACGCTCGAGCCTTAATGCTTCAAGGTGTAGACCTTTT
 AGCAGATGCTGTAGCTGTACAATGGGGCCAAAGGAAGAACTGTGATTATTGAACAGAGTTGGGGAAGT
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 CCCCTGAAGAAATTGCTCAGGTTGCTACAATTTCTGCAATGGAGACAAAGACATTGGGAACATCATTTT
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 GTCAAAAGTGTGAATCCAAGATGCCTATGTCTTGTGAGTGAAGAAAGAAATTTCCAGTGTTCACTCCAT
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 CTTGCTAACTACAGCCGAAGCTGTAGTGACAGAAATTCCTAAAGAAGAGAAGGACCCTGGAATGGGTGCA
 ATGGGTGGCATGGGAGGGGTATGGGAGCGGCATGTTT

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222671 representing NM_010477
 Red=Cloning site Green=Tags(s)

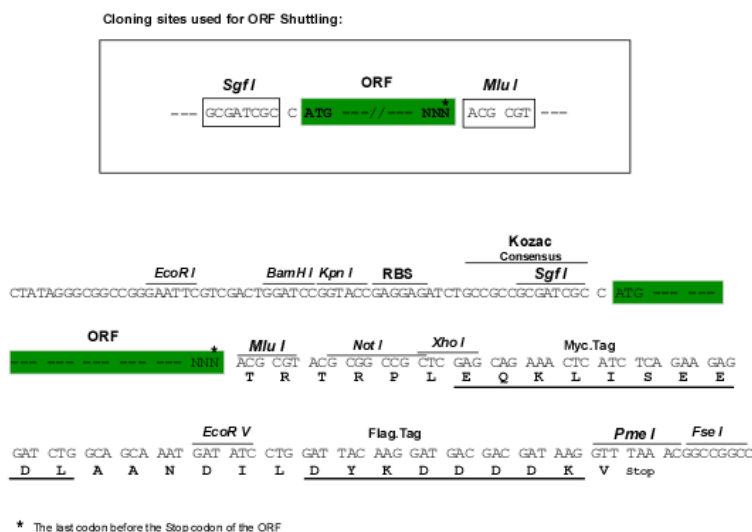
MLRLPTVLRQMRPVSRALAPHLTRAYAKDVKFGADARALMLQGVDLLADAVAVTMGPKGRTVIEQSWGS
 PKVTKDGVTVAKSIDLKDKYKNIGAKLVQDVANNTNEEAGDGTTTATVLARSIAGEFEKISKGANPVEI
 RRGVMLAYDAVIAELKKQSKPVTTPEEIAQVATISANGDKDIGNIISDAMKKVGRKGVITVKDGKTLNDE
 LEIIEGMKFDRGYISPYFINTSKGQKCEFQDAYVLLSEKKISSVQSIVPALEIANHRKPLVIIAEDVDG
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 TKDDAMLLKGKGDKAHIEKRIQEITEQLDITTSYEKEKLNERLAKLSDGVAVLVKGGTSDVEVNEKKDR
 VTDALNATRAAVEEGIVLGGGALLRCIPALDSLKPANEDQKIGIEIIKRALKIPAMTIKNAAGVEGSLI
 VEKILQSSSEVGYDAMLGDFVNMVEKGIIDPTKVVRTALLDAAGVASLLTAEAVVTEIPKEEKDPGMGA
 MGGMGGMGGMGGMF

TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM 010477

ORF Size: 1719 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

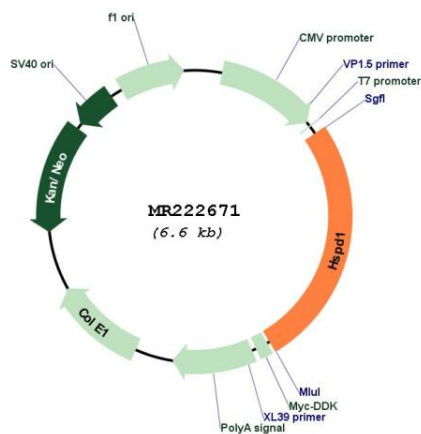
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_010477.4 , NP_034607.3
RefSeq Size:	2347 bp
RefSeq ORF:	1722 bp
Locus ID:	15510
UniProt ID:	P63038
Cytogenetics:	1 C1.2
MW:	61.4 kDa
Gene Summary:	Chaperonin implicated in mitochondrial protein import and macromolecular assembly. Together with Hsp10, facilitates the correct folding of imported proteins. May also prevent misfolding and promote the refolding and proper assembly of unfolded polypeptides generated under stress conditions in the mitochondrial matrix. The functional units of these chaperonins consist of heptameric rings of the large subunit Hsp60, which function as a back-to-back double ring. In a cyclic reaction, Hsp60 ring complexes bind one unfolded substrate protein per ring, followed by the binding of ATP and association with 2 heptameric rings of the co-chaperonin Hsp10. This leads to sequestration of the substrate protein in the inner cavity of Hsp60 where, for a certain period of time, it can fold undisturbed by other cell components. Synchronous hydrolysis of ATP in all Hsp60 subunits results in the dissociation of the chaperonin rings and the release of ADP and the folded substrate protein. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222671