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Product datasheet for MR223206

Hspa1l (NM_013558) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hspa1l (NM_013558) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hspa1l
Synonyms:	Hsc70t; Msh5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>MR223206 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGCTAATAAAGGAATGGCGATCGGCATCGACTTGGGCACCACCTACTCGTGCGTGGGCGTGTTCC
AGCACGGCAAGGTGGAGATCATCGCCAACGACCAGGGCAACCGCACGACCCCTAGCTACGTGGCCTTCAC
CGACACCGAGCGCCTCATCGGAGACGCTGCCAAGAACCAGGTGGCCATGAATCCCCAGAACACTGTTTTT
GATGCCAAACGTCTAATTGGCAGGAAGTTTAATGATCCTGTTGTGCAGTCAGATATGAAGCTTTGGCCAT
TTCAAGTGATCAATGAAGCCGGCAAACCCAAGGTGATGGTGTCCTATAAAGGAGAGAAGAAAGCCTTCTA
CCCAGAGGAGATCTCATCCATGGTACTGACGAAGATGAAGGAGACTGCAGAGGCTTTTTTGGGCCACAAT
GTCACCAACGCTGTGATCACGGTGCCAGCCTATTTCAATGACTCTCAGCGGCAAGCCACCAAGGATGCAG
GTGTCATCGCAGGACTCAATGTGCTGAGAATAATCAATGAGCCCACGGCGGCCGCCATCGCCTACGGCTT
GGATAAAGGAAGTCACGGAGAGCGGCACGTGCTCATCTTCGACCTGGGGGGTGGCACGTTCGACGTGTCC
ATCCTGACGATCGACGACGGCATCTTCGAGGTGAAGGCCACGGCGGGCGACACGCACCTGGGAGGGGAGG
ACTTCGACAACCGGCTGGTGAGCCACTTCGTGGAGGAGTTCAAGAGGAAGCACAAGAAGGACATCAGCCA
GAACAAGCGCGCGGTGCGGCGGCTGCGCACTGCGTGTGAGAGGGCCAAGAGGACGCTGTCGTCCAGCACC
CAGGCAAACCTGGAGATCGACTCTTTATATGAGGGCATCGACTTCTACACGTCCATCACTAGAGCACGGT
TTGAAGAGCTGTGTGCAGACCTATTTAGAGGCACACTTGAGCCCGTGGAAAAGTCTCTTCGGGATGCCAA
GATGGATAAGGCTAAAATCCATGACATTGTTCTAGTAGGGGGCTCCACCCGCATCCCAAAGGTGCAAAAA
CTGCTTCAGGACTACTTTAATGGACGGGATCTCAACAAGAGTATCAATCCCGATGAGGCAGTCGCCTACG
GAGCTGCAGTCCAGGCAGCTATTTTAATGGGCGACAAATCTGAAAAAGTACAGGATTTGCTTTTGTTGGA
CGTAGCTCCCCTGTCTCTAGGATTGGAGACAGCTGGGGGTGTGATGACTGTACTGATCAAGCGCAACTCC
ACCATCCCCACCAAGCAGACGCAGATCTTCACCACCTACTCGGACAACCAGCCCGGGGTGCTGATCCAGG
TGTACGAGGGCGAGAGAGCCATGACGCGCGACAACAACCTGCTGGGGCGCTTTGACTTGACTGGAATACC
TCCTGCACCTAGGGGCGTGCCACAGATCGAGGTGACCTTCGACATCGACGCCAACGGTATCCTGAACGTC
ACGGCCATGGACAAGAGCACCGGCAAGGCCAACAAGATCACCATCACCAACGACAAGGGTCGCCTGAGCA
AGGAGGAGATTGAGCGCATGGTGCAGGAGGCCGAGCGCTACAAAGCGGAGGATGAGGGCCAGAGGGAGAA
AATCGCTGCCAAAAATGCCTTAGAATCGTACGCCTTTAATATGAAGAGCGCTGTGGGTGATGAGGGTCTG
AAGGACAAGATCAGCGAGTCCGATAAAAAGAAAATACTGGATAAATGCAATGAGGTCCTTTCCTGGCTGG
AGGCCAACCAGCTGGCTGAGAAAGATGAGTTTGATCATAAAAGAAAAGAACTGGAAAATATGTGTAATCC
GATCATCACAAAACTGTACCAGAGCGGATGCACCGGGCCCACCTGTACGCCAGGGTATACTCCCGGCAGG
GCTGCCACAGGCCCTACCATCGAGGAAGTAGAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

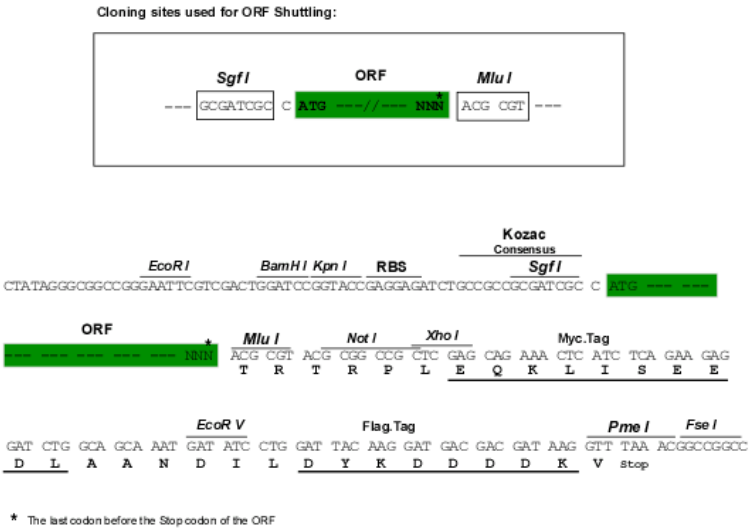
>MR223206 protein sequence
Red=Cloning site Green=Tags(s)

MAANKGMAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFTDTERLIGDAAKNQVAMNPQNTVF
DAKRLIGRKFNDPVVQSDMKLWPFQVINEAGKPKVMVSYKGEKKAFYPEEISSMVLTKMKETAEAFLGHN
VTNAVITVPAYFNDSQRQATKDAGVIAGLNVLRIINEPTAAAIAYGLDKGSHGERHVLIFDLGGGTFDVS
ILTIDDGIFEVKATAGDTHLGGEDFDNRLVSHFVEEFKRKHKKDISQNKRAVRRLRTACERAKRTLSSST
QANLEIDSLYEGIDFYTSITRARFEELCADLFRGTLEPVEKSLRDAKMDKAKIHDIVLVGGSTRIPKVQK
LLQDYFNGRDLNKSINPDEAVAYGAAVQAAILMGDKSEKVQDLLLLDVAPLSLGLETAGGVMTVLIKRNS
TIPTKQTQIFTTYSDNQPGVLIQVYEGERAMTRDNNLLGRFDLTGIPPAPRGVPQIEVTFDIDANGILNV
TAMDKSTGKANKITITNDKGRLSKEEIERMVQEAERYKAEDEGQREKIAAKNALESYAFNMKSAVGDEGL
KDKISESDKKKILDKCNEVLSWLEANQLAEKDEFDHKRKELENMCNPIITKLYQSGCTGPTCTPGYTPGR
AATGPTIEEVD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013558

ORF Size: 1926 bp

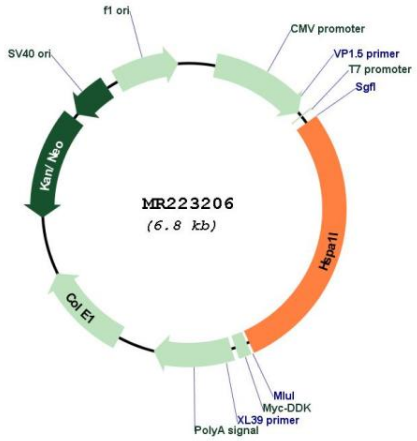
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_013558.2, NP_038586.2
RefSeq Size:	2415 bp
RefSeq ORF:	1926 bp
Locus ID:	15482
UniProt ID:	P16627
Cytogenetics:	17 18.51 cM
MW:	70.6 kDa
Gene Summary:	Molecular chaperone implicated in a wide variety of cellular processes, including protection of the proteome from stress, folding and transport of newly synthesized polypeptides, activation of proteolysis of misfolded proteins and the formation and dissociation of protein complexes. Plays a pivotal role in the protein quality control system, ensuring the correct folding of proteins, the re-folding of misfolded proteins and controlling the targeting of proteins for subsequent degradation. This is achieved through cycles of ATP binding, ATP hydrolysis and ADP release, mediated by co-chaperones. The affinity for polypeptides is regulated by its nucleotide bound state. In the ATP-bound form, it has a low affinity for substrate proteins. However, upon hydrolysis of the ATP to ADP, it undergoes a conformational change that increases its affinity for substrate proteins. It goes through repeated cycles of ATP hydrolysis and nucleotide exchange, which permits cycles of substrate binding and release. Positive regulator of PRKN translocation to damaged mitochondria. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR223206