

Product datasheet for **MC200965**

Hsf1 (NM_008296) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hsf1 (NM_008296) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Hsf1
Synonyms:	AA960185; Hsf1alpha; Hsf1beta; HSTF
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC013716 sequence for NM_008296
 CGCCGGTCGCAAGATGGCTGCGGCCATGCGAGGCCCTTGCTGTGTGTGCGCAGCGGGCGGGAGCGGCC
 GGACGGCAGGGGCAGCGACGACACTAGCTCAGCCTTCAGCCACTCTTCTAAAAGGCCACCCAGCCTCTG
 CCTGCTTCGTCGAGATGGATCTGGCCGTGGGCCCGGTGCAGCGGGGCCAGCAACGTCCCGGCTTC
 CTAACCAAGCTGTGGACCCTCGTGAGCGACCCGGACACAGACGCGCTCATCTGCTGGAGCCCGAGTGGGA
 ACAGTTCACGTGTTTGACCAGGGCAGTTTGCCAAGGAGGTGCTGCCAAGTACTTCAAGCACAACAA
 CATGGTAGCTTCGTGCGGCAGCTCAACATGTATGGCTTCCGAAAAGTAGTCCACATTGAGCAGGGTGGC
 CTGGTCAAGCCTGAGAGAGATGACACCCGAGTTCCAGCATCCTTGTTCCTTGCCTGGACAGGAACAGCTCC
 TTGAGAACATCAAGAGGAAAGTGACCAGCGTGTCCACCCTGAAGAGTGAGGACATAAAAAATACGCCAGGA
 CAGTGTACCCGGCTGTTGACAGATGTGCAGTGATGAAGGGGAAACAGGAGTGTATGGACTCCAAGCTC
 CTGGCCATGAAGCAGGAAACGAGGCCCTGTGGCGGGAGGTGGCCAGCCTTCGGCAGAAGCATGCCAGC
 AGCAAAAAGTTGTCAACAAGCTCATTAGTTCTGATCTCACTGGTGCAGTGAACCCGGATCCTGGGGGT
 GAAGAGAAAGATCCCTGATGTTGAGTGACAGCAACTCAGCACACTCTGTGCCAAGTATGGTCGACAG
 TACTCCCTGGAGCATGTCCATGGTCTGGCCATACTCAGCTCCATCTCCAGCCTACAGCAGCTCTAGCC
 TTTACTCTCTGATGCTGTACCAGCTCTGGACCATAATCTCCGATATCACTGAGCTGGCTCCCACCAG
 CCCTTTGGCCTCCCAGGCAGGAGCATAGATGAGAGGCCCTCTGTCCAGCAGCACTCTGGTCCGTGTCAAG
 CAAGAGCCCCCAGCCCACCTCACAGCCCTCGGGTACTGGAGGGGAGCCCTGGGGCCCCATCCTCCATGG
 ATACCCCTTTGTCCCAACTGCCTTCATTGACTCCATCCTTCGAGAGAGCGAGCCTACCCCTGCTGCCTC
 AAACACAGCCCCTATGGACACAACCCGAGCCCAAGCCCCGCACTCCCGACCCCTCCACCCCTGAGAAG
 TGCCTCAGCGTAGCCTGCCTAGACAAGAACGAGCTAAGTGATCACCTGGATGCCATGGACTCCAACCTGG
 ACAACCTGCAGACCATGCTGACAAGCCACGGCTTCAGTGTGGACACCAGTGCCTGCTGGACATTCAGGA
 GCTTCTGTCTCCACAAGAGCCTCCAGGCCTATTGAGGCAGAGAACAGTAACCCCGACTCAGGAAAGCAG
 CTGGTGCACACAGGCTCAGCCTCTGTTCTCTGCTGGATCCTGATGCTGTGGACACAGGGAGCAGTGAGC
 TGCTGTGCTCTTTGAGCTGGGGGAGAGCTCCTACTTCTCTGAGGGGATGACTACACGGATGATCCAC
 CATCTCTCTTCTGACAGGCACTGAACCCATAAAGCCAAGGACCCCACTGTCTCTAGAGCTCTCAGGAG
 TTGTGAGGCTGGCTTGTGCCTGGCCCCAACCTATCCCTAGGACATGGCTGGTCTAGGGAGACAAAACA
 GTTGGGTAGTCCAGGGGACCCCTAGGTCAAGCCACCACAACCCAGTGGAGCACAGATGGAACCTTGGTCT
 GGGCAGTACCTGGATCAGGAGGAAGATCTGAGGGCTGCATACCTGCTGCCTTTACCCAGCCCCAGGT
 CTACTCTGTGTCACAGTTCACAGCCACACTTGGACTGACCCTGCAGGTTGTTCAAAAATTGATTTT
 GGATTTTACATGAGAGTCCCCTTAACCCTTCACAAATAAATATATATACATACAAAAA A A

Restriction Sites: RsrII-NotI

ACCN: NM_008296

Insert Size: 1512 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:

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: [BC013716](#), [AAH13716](#)

RefSeq Size: 2032 bp

RefSeq ORF: 1512 bp

Locus ID: 15499

UniProt ID: [P38532](#)

Cytogenetics: 15 35.95 cM

Gene Summary: Function as a stress-inducible and DNA-binding transcription factor that plays a central role in the transcriptional activation of the heat shock response (HSR), leading to the expression of a large class of molecular chaperones heat shock proteins (HSPs) that protect cells from cellular insults' damage. In unstressed cells, is present in a HSP90-containing multichaperone complex that maintains it in a non-DNA-binding inactivated monomeric form. Upon exposure to heat and other stress stimuli, undergoes homotrimerization and activates HSP gene transcription through binding to site-specific heat shock elements (HSEs) present in the promoter regions of HSP genes. Activation is reversible, and during the attenuation and recovery phase period of the HSR, returns to its unactivated form. Binds to inverted 5'-NGAAN-3' pentamer DNA sequences. Binds to chromatin at heat shock gene promoters. Plays also several other functions independently of its transcriptional activity. Involved in the repression of Ras-induced transcriptional activation of the c-fos gene in heat-stressed cells. Positively regulates pre-mRNA 3'-end processing and polyadenylation of HSP70 mRNA upon heat-stressed cells in a symplekin (SYMPK)-dependent manner. Plays a role in nuclear export of stress-induced HSP70 mRNA. Plays a role in the regulation of mitotic progression. Plays also a role as a negative regulator of non-homologous end joining (NHEJ) repair activity in a DNA damage-dependent manner. Involved in stress-induced cancer cell proliferation in a IER5-dependent manner.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (4) lacks two alternate in-frame exons in the 3' coding region, compared to variant 1. It encodes isoform beta which is shorter compared to isoform gammaalpha.