

Product datasheet for **MC201854**

Hspe1 (NM_008303) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hspe1 (NM_008303) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Hspe1
Synonyms:	10kDa; Hsp10; mt-cpn10
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC024385 sequence for NM_008303 GTGGCGGCGAAGGCGAGAGTCATGGCTGGACAAGCTTTTAGGAAGTTTCTCCGCTCTTTGACAGAGTAT TGGTTGAAAGGAGTGCTGCCGAACTGTAACCAAAGGTGGCATTATGCTTCCAGAAAAGTCTCAAGGAAA AGTGTGCAAGCAACGGTCGTGGCTGTGGGGTCAGGAGGAAAGGAAAGAGTGGAGAGATTGAGCCTGTC AGTGTGAAAGTTGGAGATAAAGTTCTTCTCCAGAAATATGGAGGCACCAAAGTAGTTCTAGATGACAAGG ATTATTTCTTATTAGAGATAGTGACATTCTTGGAAAGTATGTCGACTGAAATCACTGTTGAAATGGTGT CACGTGAAGCTGCCATTCCACTGATGTCTGAACTATTTTCATCATGTAATAATTTCCATGCCTCCCTTTT ATAATAAACAGATGATGCCTAACTGACAGCCATTGTCTCTGACCTTTAGTTTCACTGTACTGTTACAAA CATTTCCAAATAAAATGATGTAATGAAAAAAAAAAAAAAAAAAAA
Restriction Sites:	RsrII-NotI
ACCN:	NM_008303
Insert Size:	309 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).



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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: [BC024385](#), [AAH24385](#)

RefSeq Size: 534 bp

RefSeq ORF: 309 bp

Locus ID: 15528

UniProt ID: [Q64433](#)

Cytogenetics: 1 C1.2

Gene Summary: Co-chaperonin implicated in mitochondrial protein import and macromolecular assembly. Together with Hsp60, 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]