

Product datasheet for **RG207795**

HSPA6 (NM_002155) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HSPA6 (NM_002155) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HSPA6
Synonyms:	HSP70B'
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG207795 representing NM_002155
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGCAGGCCACGGGAGCTCGCGGTGGGCATCGACTGGGCACCACCTACTCGTGGTGGCGGTGTTTC
 AGCAGGGCCGCGTGGAGATCCTGGCCAACGACAGGGCAACCGCACCCAGCTACGTGGCCTTCAC
 CGACACCGAGCGGCTGGTCGGGGACCGGCCAAGAGCCAGGCGGCCCTGAACCCCAACAACCGTGTTT
 GATGCCAAGCGGCTGATCGGGCGCAAGTTCGCGGACACCACGGTGCAGTCGGACATGAAGCACTGGCCCT
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 GGGTGTGTCAGGCGCGGCTGTGATGGGGACAAATGTGAGAAAGTGCAGGATCTCCTGCTGTGGA
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 ACTATCCCCACCAAGCAGACCCAGACTTTCACCACCTACTCGGACAACCAGCCTGGGGTCTTCATCCAGG
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 AGGAGGAGTGGAGAGGATGGTTCATGAAGCCGAGCAGTACAAGGCTGAGGATGAGGCCAGAGGGACAG
 AGTGGCTGCCAAAACCTCGTGGAGGCCATGTCTTCATGTGAAAGTCTTTGCAAGAGGAAAGCCTT
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 AGCACAACCAGCTGGCAGAGAAGGAGGATATGAGCATCAGAAGAGGGAGCTGGAGCAAACTGTGCCCC
 CATCTTCTCCAGGCTCTATGGGGGGCTGGTGTCCCTGGGGGCGAGCAGTTGTGGCACTCAAGCCCGCCAG
 GGGGACCCAGCACCGGCCCATCATTGAGGAGTTGAT

ACGCGTACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG207795 representing NM_002155
 Red=Cloning site Green=Tags(s)

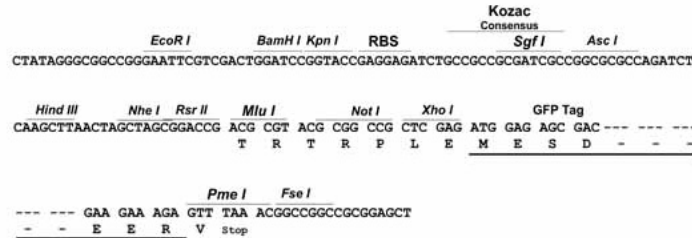
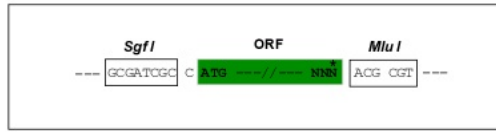
MQAPRELAVIDLGTYSVGVFQQGRVEILANDQGNRTTPSYVAFTDTERLVGDAAKSQAALNPHTNVF
 DAKRLIGRKFADTTVQSDMKHWPFRVSEGGKPKVRVCYRGEDKTFYPPEISSMVL SKMKETA EAYLGQP
 VKHAVITVPAYFNDSQRQATKDAGAIAGLNLVRIINEPTAAAIAYGLDRRGAGERNVLI FDLGGGTFDVS
 VLSIDAGVFEVKATAGDTHLGGEDFDNRLVNHFMEEFRKHKGKDL SGNKRALRRLTACERAKRTLSSST
 QATLEIDSLFEGVDFYTSITRARFEELCSDLFRSTLEPVEKALRDAKLKQAQIHDVVLVGGSTRIPKVQK
 LLQDFFNKELNKSINPDEAVAYGAAVQAAVLMDKCEKVQDLLLDVAPLSLGLTAGGVMTTLIQRNA
 TIPTKQTQFTTYSNQPVGFIQVYEGERAMTKDNNLLGRFELSGIPPAPRGVPQIEVTFDIDANGILSV
 TATDRSTGKANKITITNDKGRLSKEEVERMVHEAEQYKAEDAQRDRVAANKSLEAHVFHVKGSLQEESL
 RDKIPEEDRRKMQDKREVLAWEHNLAEKEEYEHQKRELEQICRPIFSRLYGGPGVPGGSSCGTQARQ
 GDPSTGPIIEEVD

TRTRPLE – GFP Tag – V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_002155

ORF Size: 1929 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.

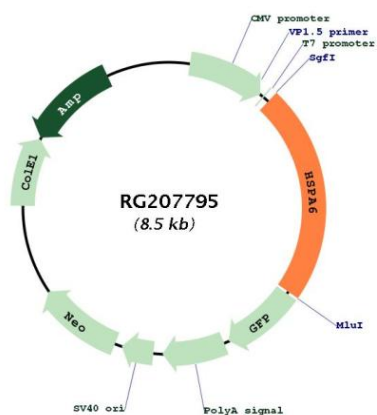
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<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:	NM_002155.3 , NP_002146.2
RefSeq Size:	2664 bp
RefSeq ORF:	1932 bp
Locus ID:	3310
UniProt ID:	P17066
Cytogenetics:	1q23.3
Domains:	HSP70
Protein Pathways:	Antigen processing and presentation, Endocytosis, MAPK signaling pathway, Spliceosome
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 (PubMed:26865365).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG207795