

## Product datasheet for **RC201397**

### Grp75 (HSPA9) (NM\_004134) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Grp75 (HSPA9) (NM_004134) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HSPA9
Synonyms:	CRP40; CSA; EVPLS; GRP-75; GRP75; HEL-S-124m; HSPA9B; MOT; MOT2; MTHSP75; PBP74; SAAN; SIDBA4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide  
Sequence:

>RC201397 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGATAAGTGCCAGCCGAGCTGCAGCAGCCGCTCTCGTGGCGCCGAGCCTCCCGGGCCCTACGGCCG  
CCCGCCACCAGGATAGCTGGAATGGCCTTAGTCATGAGGCTTTTAGACTTGTTTCAAGGCGGATTATGC  
ATCAGAAGCAATCAAGGGAGCAGTTGTTGGTATTGATTTGGTACTACCAACTCTGCGTGGCAGTTATG  
GAAGGTAACGAGCAAAGGTGCTGGAGAATGCCGAAGGTGCCAGAACCACCCCTTCAGTTGTGGCCTTTA  
CAGCAGATGGTGAGCGACTTGTGGAATGCCGGCCAAGCGACAGGCTGTCACCAACCCAAACAATACATT  
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AAATGCTGTGATCACAGTCCCAGCTTATTTCAATGACTCGCAGAGACAGGCCACTAAAGATGCTGGCCAG  
ATATCTGGACTGAATGTGCTTCGGGTGATTAATGAGCCACAGCTGCTGCTCTTGCTATGGTCTAGACA  
AATCAGAAAGACAAAGTCATTGCTGTATATGATTTAGGTGGTGGAACTTTTGATATTTCTATCCTGGAAT  
TCAGAAAGGAGTATTTGAGGTGAAATCCACAAATGGGGATACCTTCTTAGGTGGGGAAGACTTTGACCAG  
GCCTTGCTACGGCACATTGTGAAGGAGTTCAAGAGAGAGACAGGGGTTGATTTGACTAAAGACAACATGG  
CACTTCAGAGGGTACGGGAAGCTGCTGAAAAGGCTAAGTGTGAACTCTCCTCATCTGTGCAGACTGACAT  
CAATTTGCCCTATCTTACAATGGATTCTTCTGGACCAAGCATTGAATATGAAGTTGACCCGTGCTCAA  
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GCTGCCATTACAGGAGGTGTGTTGGCCGGCGATGTCACGGATGTGCTGCTCCTTGATGCTACTCCCTGT  
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GAGTTCCTCAGATTGAAGTTACATTTGACATTGATGCCAATGGGATAGTACATGTTTCTGCTAAAGATAA  
AGGCACAGGACGTGAGCAGCAGATTGTAATCCAGTCTTCTGGTGGATTAAGCAAAGATGATATTGAAAT  
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GTGCAACAAGCTGAAAGAAGAGATTTCCAAAATGAGGGAGCTCCTGGCTAGAAAAGACAGCGAAACAGGA  
GAAAATATTAGACAGGCAGCATCCTCTCTTTCAGCAGGCATCATTGAAGCTGTTTCAAATGGCATAAAAA  
AGATGGCATCTGAGCGAGAAGGCTCTGGAAGTTCTGGCACTGGGGAACAAAAGGAAGATCAAAGGAGGA  
AAAACAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201397 protein sequence  
 Red=Cloning site Green=Tags(s)

MISASRAAAARLVGAAASRGPTAARHQDSWNLGSHAEFRLVSRRDYASEAIKGAVVGIDLTGTTNSCVAVM  
 EGKRAKVLENAEGARTTPSVVAFADGERLVGMPAKRQAVTNPNTFYATKRLIGRRYDDPEVQKDIKNV  
 PFKIVRASNGDAWVEAHGKLYSPSQIGAFVLMKMKETAENYLGRATAKNAVITVPAYFNDSQRQATKDAGQ  
 ISGLNVLRVINEPTAAALAYGLDKSEDKVIAVYDLGGGTFDISILEIQKGVFEVKSTNGDTFLGGEDFDQ  
 ALLRHIIVKEFKRETGVDLTKDNMALQRVREAAEKAKCELSVSVQTDINLPYLTMDSSGPKHLNMKLTRAQ  
 FEGIVTDLIRRTIAPCQKAMQDAEVSKSDIGEVILVGGMTRMPKVQQTVDLFRAPSKAVNPDEAVAIG  
 AAIQGGVLAGDVTDVLLLDVTPLSLGIETLGGVFTKLINRNTTIPTKKSQVFSTAADGQTQVEIKVCQGE  
 REMAGDNKLLGQFTLIGIPPAPRGVPQIEVTFDIDANGIVHVSADKGTGREQQIIVIQSSGGLSKDDIEN  
 MVKNAEKYAEEDRRKKERVEAVNMAEGIIHDTETKMEEFKQQLPADECNKLKEEISKMRELLARKDSETG  
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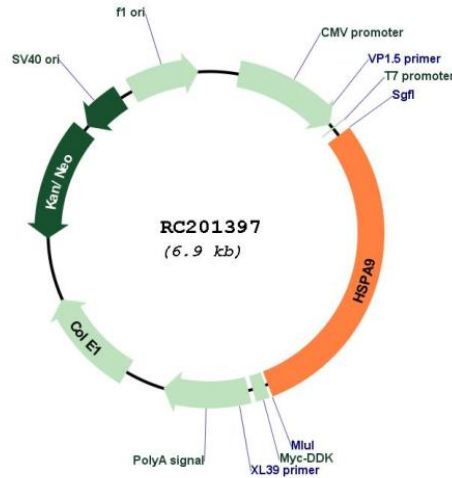
Chromatograms: [https://cdn.origene.com/chromatograms/mk6156\\_g02.zip](https://cdn.origene.com/chromatograms/mk6156_g02.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_004134

ORF Size: 2037 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](mailto: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.

RefSeq: [NM\\_004134.2](#)

RefSeq Size: 3506 bp

RefSeq ORF: 2040 bp

Locus ID: 3313

Domains: HSP70

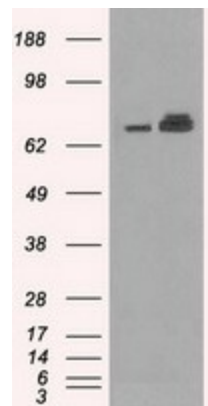
Protein Families: Stem cell - Pluripotency

**Protein Pathways:** RNA degradation

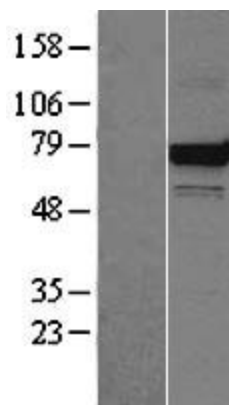
**MW:** 73.7 kDa

**Gene Summary:** This gene encodes a member of the heat shock protein 70 gene family. The encoded protein is primarily localized to the mitochondria but is also found in the endoplasmic reticulum, plasma membrane and cytoplasmic vesicles. This protein is a heat-shock cognate protein. This protein plays a role in cell proliferation, stress response and maintenance of the mitochondria. A pseudogene of this gene is found on chromosome 2.[provided by RefSeq, May 2010]

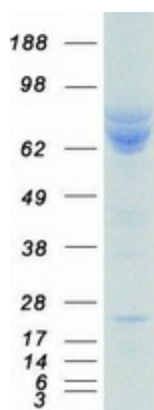
### Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HSPA9 (Cat# RC201397, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HSPA9 (Cat# [TA500516]). Positive lysates [LY401334] (100ug) and [LC401334] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401334]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201397 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HSPA9 protein (Cat# [TP301397]). The protein was produced from HEK293T cells transfected with HSPA9 cDNA clone (Cat# RC201397) using MegaTran 2.0 (Cat# [TT210002]).