

Product datasheet for **RG202209**

Hsc70 (HSPA8) (NM_006597) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hsc70 (HSPA8) (NM_006597) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Hsc70
Synonyms:	HEL-33; HEL-S-72p; HSC54; HSC70; HSC71; HSP71; HSP73; HSPA10; LAP-1; LAP1; NIP71
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG202209 representing NM_006597
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCAAGGACCTGCAGTTGGTATTGATCTTGGCACCACTACTCTTGTGTGGGTGTTTTCCAGCAGC
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 CACCAAGCTGTACCAGAGTGCAGGAGGCATGCCAGGAGGAATGCCTGGGGGATTTCTGGTGGTGGAGCT
 CCTCCCTCTGGTGGTGTCTCCTCAGGGCCACCATTGAAGAGGTTGAT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG202209 representing NM_006597
 Red=Cloning site Green=Tags(s)

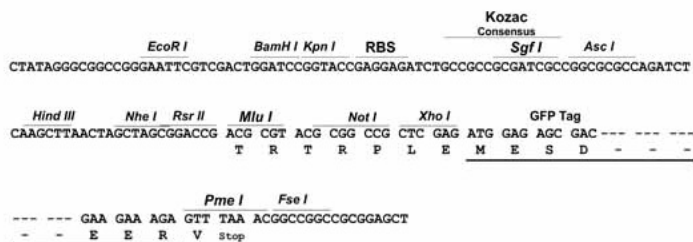
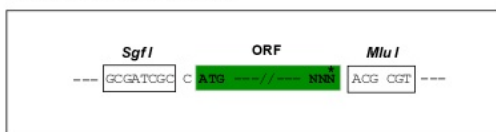
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 TIEDGIFEVKSTAGDTHLGGEDFDNRMVNHFAEFKRKHKKDISENKRAVRRRLTACERAKRTLSSTQA
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 PTKQTQFTTYSNQPGLVIQVYEGERAMTKDNNLLGKFELTGIPPAPRGVVPQIEVTFDIDANGILNVSA
 VDKSTGKFNKIIITNDKGRLSKEDIERMVQEAKEYKAEDEKQRDKVSSKNSLESYAFNMKATVEDEKLQG
 KINDEKQKILDKCNEIINWLDKNQTAKEEFEHQKLEKVCNPIITKLYQSAGGMPGGMPGGFPGGGA
 PPSGGASSGPTIEEVD

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_006597

ORF Size: 1938 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_006597.3](#), [NP_006588.1](#)

RefSeq Size: 2276 bp

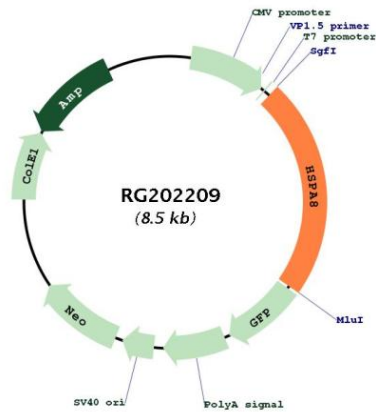
RefSeq ORF: 1941 bp

Locus ID: 3312

UniProt ID: [P11142](#)

Cytogenetics: 11q24.1
Domains: HSP70
Protein Families: Stem cell - Pluripotency
Protein Pathways: Antigen processing and presentation, Endocytosis, MAPK signaling pathway, Spliceosome
Gene Summary: This gene encodes a member of the heat shock protein 70 family, which contains both heat-inducible and constitutively expressed members. This protein belongs to the latter group, which are also referred to as heat-shock cognate proteins. It functions as a chaperone, and binds to nascent polypeptides to facilitate correct folding. It also functions as an ATPase in the disassembly of clathrin-coated vesicles during transport of membrane components through the cell. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2011]

Product images:



Circular map for RG202209