

Product datasheet for **RC200270**

HSP70-1A (HSPA1A) (NM_005345) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HSP70-1A (HSPA1A) (NM_005345) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HSPA1A
Synonyms:	HEL-S-103; HSP70-1; HSP70-1A; HSP70-2; HSP70.1; HSP70.2; HSP70I; HSP72; HSPA1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>RC200270 representing NM_005345
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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ATGGCCAAAGCCGCGCGATCGGCATCGACCTGGCACCACCTACTCCTGCGTGGGGGTGTTC AACACAG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200270 representing NM_005345
 Red=Cloning site Green=Tags(s)

MAKAAAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFDTERLIGDAAKNQVALNPQNTVFDA
 KRLIGRKFGDPVVQSDMKHWPVQVINDGDKPKVQVSYKGETKAFYPEEISSMVLTKMKEIAEAYLGYPVV
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 TDKSTGKANKITITNDKGRLSKEEIERMVQEAKEYKADEVEQRRERSAKNALESYAFNMKSAVEDEGLKG
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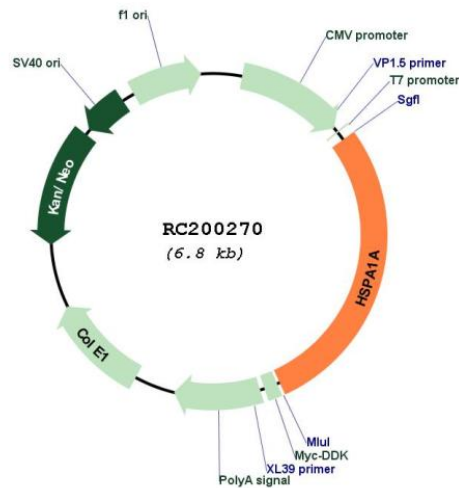
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2663_a07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_005345

ORF Size: 1923 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.

RefSeq: [NM_005345.3](#), [NM_005345.4](#), [NM_005345.5](#), [NP_005336.2](#)

RefSeq Size: 2383 bp

RefSeq ORF: 1926 bp

Locus ID: 3303

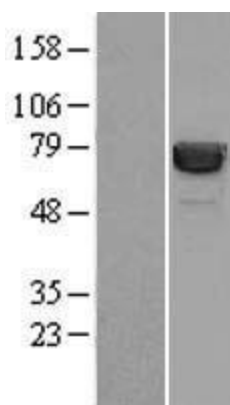
Domains: HSP70

Protein Pathways: Antigen processing and presentation, Endocytosis, MAPK signaling pathway, Prion diseases, Spliceosome

MW: 69.9 kDa

Gene Summary:

This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. In conjunction with other heat shock proteins, this protein stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and in organelles. It is also involved in the ubiquitin-proteasome pathway through interaction with the AU-rich element RNA-binding protein 1. The gene is located in the major histocompatibility complex class III region, in a cluster with two closely related genes which encode similar proteins. [provided by RefSeq, Jul 2008]

Product images:

Western blot validation of overexpression lysate (Cat# [LY401646]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200270 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).