

Product datasheet for **RC212496**

HSP90AA1 (NM_005348) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HSP90AA1 (NM_005348) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HSP90AA1
Synonyms:	EL52; HEL-S-65p; HSP86; Hsp89; HSP89A; Hsp90; HSP90A; HSP90N; Hsp103; HSPC1; HSPCA; HSPCAL1; HSPCAL4; HSPN; LAP-2; LAP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC212496 representing NM_005348
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCTGAGGAAACCCAGACCCAAGACCAACCGATGGAGGAGGAGGTTGAGACGTTCCGCTTTCAGG
 CAGAAATTGCCAGTTGATGTCATTGATCATCAATACTTTCTACTCGAACAAAGAGATCTTCTGAGAGA
 GCTCATTTCAAATTCATCAGATGCATTGGACAAAAATCCGGTATGAAAGCTTGACAGATCCAGTAAATTA
 GACTCTGGGAAAGAGCTGCATATTAACCTTATACCGAACAAACAAGATCGAACTCTCACTATTGTGGATA
 CTGGAATTGGAATGACCAAGGCTGACTTGTCAATAACCTTGGTACTATCGCCAAGTCTGGGACCAAAGC
 GTTCATGGAAGCTTTCAGGCTGGTGCAGATATCTCTATGATTGGCCAGTTCGGTGTGGTTTTATTCT
 GCTTATTTGGTTGCTGAGAAAGTAACTGTGATCACCAAACATAACGATGATGAGCAGTACGTTGGGAGT
 CCTCAGCAGGGGATCATTACAGTGAGGACAGACACAGGTGAACCTATGGTCTGGAACAAAAGTTAT
 CCTACACCTGAAAGAAGACCAAACTGAGTACTTGGAGGAACGAAGAATAAAGGAGATTGTGAAGAAACAT
 TCTCAGTTTATTGGATATCCATTACTCTTTTTGTGGAGAAGGAACGTGATAAAGAAGTAAGCGATGATG
 AGGCTGAAGAAAAGGAAGACAAAGAAGAAGAAAAGAAAAGAAAGAGAAAAGAGTCCGAAGACAAACCTGA
 AATTGAAGATGTTGGTCTGATGAGGAAGAAGAAAAGAAAGGATGGTGACAAGAAGAAGAAGAAGATT
 AAGGAAAAGTACATCGATCAAGAAGAGCTCAACAAAACAAAGCCCATCTGGACCAGAAAATCCCGACGATA
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 CTGTTTGAACAGAAAAGAAAAGAAACAACATCAAATTTGTATGTACGCAGAGTTTTTCATCATGGATAACT
 GTGAGGAGCTAATCCCTGAATATCTGAACTTCATTAGAGGGGTGGTAGACTCGGAGGATCCCTCTAAA
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 AAAAGGTGGTTGTGTCAAACCGATTGGTGACATCTCCATGCTGTATTGTCACAAGCACATATGGCTGGAC
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 AAGAAACACCTGGAGATAAACCTGACCATTCCATTATTGAGACCTTAAGGCAAAAGGCAGAGGCTGATA
 AGAACGACAAGTCTGTGAAGGATCTGGTCATCTTGCTTTATGAAACTGCGCTCCTGTCTTCTGGCTTCAG
 TCTGGAAGATCCCAGACACATGCTAACAGGATCTACAGGATGATCAAACCTTGGTCTGGGTATTGATGAA
 GATGACCCTACTGCTGATGATACCAGTCTGCTGTAACGAAGAATGCCACCCCTTGAAGGAGATGACG
 ACACATACGCATGGAAGAAGTAGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATGAGTTTAA

Protein Sequence: >RC212496 representing NM_005348
Red=Cloning site Green=Tags(s)

MPEETQTQDQPMEEEEVETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNSSDALDKIRYESLTDPSKL
 DSGKELHINLIPNKQDRTLTIVDTGIGMTKADLINNLTIAKSGTKAFMEALQAGADISMIGQFVGFYS
 AYLVAEKVTVITKHNDDEQYAWESSAGGSFTVRTDTGEPMGRGTVILHLKEDQTEYLEERRIKEIVKKH
 SQFIGYPITL FVEKERDKEVSDDEAEKEDEKEEKEEKEE SEDKPEIEDVGSDEEEEEKKDGDKKKKKKI
 KEKYIDQEELNKTPIWTRNPDDITNEEYGEFYKSLTNDWEDHLAVKHFSVEGQLEFRALLFVPRRAPFD
 LFENRKKKNNIKLYVRRVFIMDNCEELIPEYLNFRGVVDSDELPLNISREMLQQSKILKVKRNLVKKC
 LELFTELAEDKENYKQFYEQFSKNIKLGIHEDSQNRKLSSELLRYYSASGDEMVS LKDYCTRMKENQKH
 IYYITGETKDQVANSFVERLRKHGLEVIYMIEPIDEYCVQQLKEFEGKTLVSVTKEGLELPEDEEEKK
 QEEKTKFENLCKIMKDILEKKVEKVVVSNRLVTSPCCIVTSTYGWTANMERIMKAQALRDNSTMGYMAA
 KKHLEINPDHSI IETLRQKAEADKNDKSVKDLVILLYETALLSSGFSLEDPQTHANRIYRMIKLGLGIDE
 DDPTADDTSAAVTEEMPPLEGDDDDTSRMEEVD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6292_a11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_005348

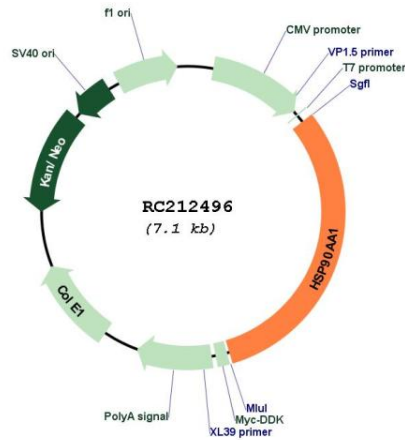
ORF Size: 2196 bp

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](#)

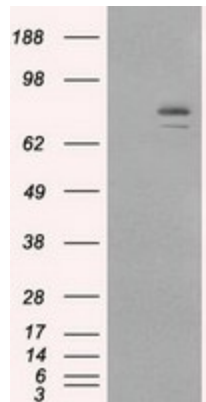
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_005348.4
RefSeq Size:	2912 bp
RefSeq ORF:	2199 bp
Locus ID:	3320
UniProt ID:	P07900
Cytogenetics:	14q32.31
Domains:	HSP90, HATPase_c
Protein Families:	Druggable Genome
Protein Pathways:	Antigen processing and presentation, NOD-like receptor signaling pathway, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer
MW:	84.5 kDa
Gene Summary:	The protein encoded by this gene is an inducible molecular chaperone that functions as a homodimer. The encoded protein aids in the proper folding of specific target proteins by use of an ATPase activity that is modulated by co-chaperones. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]

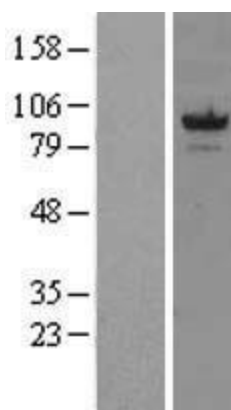
Product images:



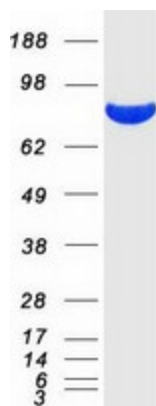
Circular map for RC212496



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HSP90AA1 (Cat# RC212496, 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-HSP90AA1 (Cat# [TA500883]). Positive lysates [LY417365] (100ug) and [LC417365] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417365]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212496 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HSP90AA1 protein (Cat# [TP312496]). The protein was produced from HEK293T cells transfected with HSP90AA1 cDNA clone (Cat# RC212496) using MegaTran 2.0 (Cat# [TT210002]).