

Product datasheet for **MC220728**

Hsp90aa1 (BC046614) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hsp90aa1 (BC046614) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Hsp90aa1
Synonyms:	86kDa, 89kDa
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC046614
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGCCTGAGGAAACCCAGACCCAAGACCAACCAATGGAGGAGGAGGAGTTCGAGACCTTTGCCTTTGAGG
 CAGAAATTGCCAGTTAATGTCCTTGATCATCAATACCTTCTACTCGAACAAAGAGATCTTTCTGAGGGA
 GCTCATCTCCAATTCATCGGACGCTCTGGATAAAATCCGTTACGAGAGCCTGACGGACCCAGTAACTG
 GACTCGGGGAAGGAGCTGCACATCAATCTCATTCCCAGCAAACAGGACCGAACCTGACCATTGTGGATA
 CCGGGATTGGAATGACCAAGGCCGACTTGATCAATAACCTTGGCACCATTGCCAAGTCGGGCACCAAAGC
 CTTTCATGGAGGCTTTGCAGGCTGGTGCAGATATCTCTATGATTGGCCAGTTTGGTGTGTTTACTCT
 GCCTATTTGGTTGCTGAGAAAGTACTGTCATCACGAAGCATAACGACGATGAGCAGTATGCCTGGGAGT
 CCTCAGCTGGGGATCCTTCACAGTGAGGACTGACACAGGTGAACCAATGGGTCGTGGAACAAAGGTTAT
 CTTGCATCTGAAAGAAGACCAACAGAGTATTTGGAGGAAAGGAGAATAAAGGAGATCGTGAAGAAGCAT
 TCTCAGTTCATTGGCTATCCATTACTCTCTTTGTGGAGAAGGAACGAGATAAGGAAGTCAGTGATGATG
 AGGCTGAAGAAAAGGAAGAGAAAAGGAAGAGAAAAGAAAAGGAAGTCTGATGATAAACCTGA
 AATAGAAGATGTTGGCTCTGATGAAGAAGAGGAGGAGAAGAAGGATGGTGACAAGAAGAAAAGAAAG
 ATAAAGGAAAAGTACATTGATCAAGAAGAACTCAACAAAACAAAGCCGATTTGGACGAGAAATCCTGATG
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 AAAGCATTTTTCTGTTGAAGGACAATTAGAATTCGGGGCCCTTCTTTTGTCCCAAGACGCGCTCCTTTT
 GATCTGTTTGAACAGAAAAGAAAAGAACATCAAGTTGTATGTTTCGAGAGTATTTATCATGGATA
 ACTGTGAGGAATTAATCCCTGAGTATCTGAATTTCTAGAGGGTAGTGGATTCTGAGGATCTCCCTCT
 AAATATTTCCCGTGAAATGCTGCAACAAAGTAAATTTCTGAAAGTTATCAGAAAGAAATTTGGTCAAGAAA
 TGCTTAGAACTATTTACTGAAGTACGAGAAGATAAAGAGAACTACAAAAGTTTTATGAGCAGTTCTCAA
 AAAATATAAAGCTTGGAATTCACGAGGACTCTCAGAATCGGAAGAAGCTTTCAGAGCTGTTGCGGTA
 CACATCTGCTTCTGGGACGAGATGGTTTCTCTGAAGGACTACTGTACCAGAATGAAGGAAAACAGAA
 CACATCTATTTTATCACAGGTGAGACCAAGGACCAGGTTGCTAACTCCGCTTTGTGGAACGCTCCGAA
 AGCATGGCTTAGAAGTAATTTATGATTGAGCCATTGATGAGTATTGTGTGAACAGCTGAAGGAATT
 TGAGGGCAAGACCTTGGTGTCTGTTACCAAGAAGGACTGGAACCTCCAGAAGATGAAGAGGAAAAGAA
 AAACAGGAAGAGAAAAGACAAAATTTGAGAACCTCTGCAAAATTATGAAAGATATTTTGGAGAAGAAG
 TTGAAAAGGTGGTTGTGTCAAACCGACTGGTGACATCCCGTGCTGTATTGTACAAGCAGATATGGGTG
 GACAGCAAACATGGAGAGAATCATGAAAGCTCAAGCCCTCAGAGACAACCTCAACAATGGGTACATGGCA
 GCAAAGAAACACCTGGAGATAAATCCTGATCACTCCATTATTGAAACCTTAAGGCAAAAGGCAGAGGCTG
 ACAAGAATGACAAATCTGTGAAGGATCTGGTCATCTTGCTGTATGAACTGCACTCCTATCTTCTGGCTT
 CAGTCTGGAAGATCCCGAGCCCATGCTAACAGGATCTACAGGATGATCAAGCTTGGTCTAGGTATTGAT
 GAGGATGATCCTACTGTGGATGACACAGTGCTGCTGTAAGTGAAGAAATGCCTCCCTGGAAGGAGATG
 ACGACACATCACGCATGGAAGAAGTAGACTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI
 ACCN: BC046614
 Insert Size: 2202 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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:	BC046614 , AAH46614
RefSeq Size:	2800 bp
RefSeq ORF:	2201 bp
Locus ID:	15519
Cytogenetics:	12 60.75 cM
Gene Summary:	<p>Molecular chaperone that promotes the maturation, structural maintenance and proper regulation of specific target proteins involved for instance in cell cycle control and signal transduction. Undergoes a functional cycle that is linked to its ATPase activity which is essential for its chaperone activity. This cycle probably induces conformational changes in the client proteins, thereby causing their activation. Interacts dynamically with various co-chaperones that modulate its substrate recognition, ATPase cycle and chaperone function. Engages with a range of client protein classes via its interaction with various co-chaperone proteins or complexes, that act as adapters, simultaneously able to interact with the specific client and the central chaperone itself. Recruitment of ATP and co-chaperone followed by client protein forms a functional chaperone. After the completion of the chaperoning process, properly folded client protein and co-chaperone leave HSP90 in an ADP-bound partially open conformation and finally, ADP is released from HSP90 which acquires an open conformation for the next cycle. Apart from its chaperone activity, it also plays a role in the regulation of the transcription machinery. HSP90 and its co-chaperones modulate transcription at least at three different levels. In the first place, they alter the steady-state levels of certain transcription factors in response to various physiological cues. Second, they modulate the activity of certain epigenetic modifiers, such as histone deacetylases or DNA methyl transferases, and thereby respond to the change in the environment. Third, they participate in the eviction of histones from the promoter region of certain genes and thereby turn on gene expression. Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes. Antagonizes STUB1-mediated inhibition of TGF-beta signaling via inhibition of STUB1-mediated SMAD3 ubiquitination and degradation.[UniProtKB/Swiss-Prot Function]</p>