

Product datasheet for **MR222136**

Hsph1 (NM_013559) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hsph1 (NM_013559) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hsph1
Synonyms:	105kDa; AI790491; hsp-E7I; Hsp105; Hsp110; hsp110/105
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR222136 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGGTGGTTGGGCTAGACGTAGGCTCACAGAGCTGCTACATTGCGGTGGCGCGGCCGGGGGCATCG
 AGACCATCGCAACGAGTTCAGCGACCGCTGCACCCCGTCAGTCATATCATTGGATCAAAAAACAGAAC
 AATTGGAGTTGCAGCAAAAAACAGCAAATCACTCATGCAAAACAATACGGTCTCTAGCTTTAAGAGATT
 CATGGCAGAGCATTCAATGACCCCTTCATTGAGAGAAAAGGAGAACCCTGAGCTATGATTTGGTCCCAA
 TGAAAAATGGTGGCGTGGGAATAAAGGTCATGTACATGGATGAAGAACATTTCTTCAGTGTGGAGCAGAT
 AACAGCCATGCTGCTGACTAAGTAAAGGAAAAGTGCAGAAAACAACCTCAAGAAGCCAGTGACAGACTGT
 GTCATCTCAGTCCCATCCTTCTCACAGATGCTGAGCGAAGGTCTGTGCTGGATGCTGCGCAGATTGTGG
 GCTTGAAGTCTTGGCGCTCATGAATGACATGACGGCTGTTGCTTTGAATTATGGGATTTATAAGCAAGA
 TCTCCCGAATGCCGAGGAGAAGCCACGGGTGGTGGTGTGTTGTTGACATGGGACACTCATCTTTCCAAGT
 TCTGCCTGTGCTTTTAAACAAAGGAAAAGTGAAGGTTCTAGGCACAGCTTTTGATCCCTTCTTAGGAGGAA
 AGAACTTTGATGAGAAGCTAGTAGAACATTTTTGTGCTGAATTTAAAACCAAGTACAAATTTGGATGCAAA
 ATCCAAAATTCGAGCCCTCCTTCGTCTCCATCAGGAGTGTGAAAAGTTGAAAAGCTCATGAGTTCTAAC
 AGCACGGACCTGCCGCTGAACATCGAGTGTCTTATGAATGACAAGGATGTCTCTGGGAAGATGAACAGGT
 CACAGTTTGAAGAACTGTGTGCTGAGCTCCTGCAAAAAATAGAGGTCCCCTTCACTCGTTGATGGCACA
 GACTCAGCTCAAGGCTGAAGATGTGAGTGCCATTGAGATAGTGGGAGGTGCCACAAGAATCCCAGCTGTG
 AAAGAAAGAATTGCCAAGTCTTTGGAAAAGATGTCAGCACCACGCTCAATGCAGACGAAGCTGTGGCCA
 GAGGCTGTGACTGCAGTGTGCAATTTCTTCCGGCATTTAAAGTTAGAGAGTTCTCTGACCCAGTGTG
 AGTTCCTTTTCCAATATCTCTGGTCTGGAACCAGGACTCGGAAGAAACGGAAGGTGTGCACGAGGTGTT
 AGTCGGAACCATGCTGCTCCTTTCTCAAAGTGCTCACCTTCTGAGAAGGGGGCCCTTTGAGCTAGAAG
 CTTTCTATTCTGACCCTCAAGGAGTTCATATCCAGAAGCAAAAAAGGCCGTTTTGTTGTTGAGAAATGT
 TTCTGCACAGAAAGATGGAGAGAAGTCGAGAGTGAAGGTCAAAGTGCCTGTGAACACACATGGCATCTTC
 ACCATCTCCACGGCTTCCATGGTGGAGAAGTCCCAGCCGAGGAAGAGGATGGCTCCTCTCGAGGCAG
 ACATGGAATGTCAAACCCAGAGGCCAACAGAAAGCTCGGATGTGGATAAAAAATCCAGCAAGACAACAG
 TGAAGCTGGAACACAGCCCCAGGTACAACTGATGGTCAACAAACCTCACAGTCTCCCCCTTCACTGAA
 CTTACCTCAGAAGAAAGCAAAACCCAGATGCTGACAAAGCAAAATGAAAAGAAAGTTGATCAGCCTCCAG
 AAGCCAAGAAACCTAAAATAAAGGTGGTAAATGTTGAGCTGCCTGTAGAAGCCAACCTGGTATGGCAGTT
 AGGGAGAGACCTTCTAACATGTATATTGAGACAGAGGGCAAGATGATCATGCAAGACAAGCTGGAGAAG
 GAGCGGAACGACGCCAAGAACCGCTGGAGGAGTGTGTATATGAGTTCAGGGACAAGCTATGTGGACCAT
 ATGAGAAATTCATATGTGAGCAGGAACATGAGAAGTCTTGGAGCTTCTAACAGAGACGGAAGACTGGCT
 GTATGAGGAAGGGGAGGACCAGGCTAAGCAGGCATACATTGACAAGTTGGAAGAGCTGATGAAAATGGGC
 ACTCCTGTTAAAGTCAGATTTCAAGAAGCTGAGGAACGACCGAAAGTGTGGAGGAGCTGGGGCAGCGCC
 TGCAGCACTATGCCAAGATTGCAGCGGACTTCAGAGGCAAGGATGAGAAATACAACCACATTGATGAATC
 AGAAATGAGAAGGTTGAGAAGTCTGTTAATGAGGTGATGGAGTGGATGAATAATGTCATGAATGCTCAG
 GCTAAAAGAAGTCTTGATCAAGACCCTGTTGTTGGAACCTCATGAAATCAGAGCGAAGGTCAAGGAATTGA
 ACAATGTTTGTGAACCTGTTGTAACCAACCAAAAAATCGAGTCACTAACTGGAGAGAAGTCC
 AAATGGCCCAATATTGACAAGAAAGAAGATTTAGAAGGCAAAAAATATCTTGGTGTGAAGCTCCGCAT
 CAGAATGGTGAATGCCACCCTAATGAGAAGGGCTCTGTCAACATGGACCTGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR222136 protein sequence
Red=Cloning site Green=Tags(s)

MSVVGLDVGSQSCYIAVARAGGIETIANEFSDRCTPSVISFGSKNRTIGVAAKNQQITHANNTVSSFKRF
HGRAFNDFPIQKEKENLSYDLVPMKNGGVIKVMYMDEEHFFSVEQITAMLLTKLKETAENLKKPVTDC
VISVPSFFTDERRSVLDAAQIVGLNCLRLMNDMTAVALNYGIYKQDLPAEEKPRVVVFVDMGHSSFQV
SACAFNKGKLVLTAFDPFLGGKNFDEKLVEHFCAEFKTKYKLDKSKIRALLRLHQECEKLLKLMSSN
STDPLNIECFMNDKDVSGKMNRSQFEELCAELLQKIEVPLHSLMAQTQLKAEDVSAIEIVGGATRIPAV
KERIAKFFGKDVSTTLNADEAVARGCALQCAILSPAFAKVRFSVTDVAVPFPIISLVNHDSEETEGVHEVF
SRNHAAPFSKVLTFRRGPFELEAFYSDPQGVPYPEAKIGRFVVQNVSAQKDGEKSRVKVKVRVNTHGIF
TISTASMVEKVPTEEDGSSLEADMECPNQRPTESSDVDKNIQQDNSEAGTQPQVQTDGQQTSSQSPSP
LTSEESKTPDADKANEEKVDQPPEAKPKIKVVNVELPVEANLVWQLGRDLLNMYIETEGKMIMQDKLEK
ERNDAKNAVEECVYFRDKLCGPYEKFIGEQEHEKFLRLLTETEDWLYEEGEDQAKQAYIDKLEELMKMG
TPVKVRFQEAERPKVLEELGQRLQHYAKIAADFRGKDEKYNHIDSEMKKVEKSVNEVMEWMNNVMNAQ
AKRSLDQDPVVRTHEIRAKVKELNNVCEPVVTQPKPKIESPKLERTPNGPNIDKKEDLEGKNNLGAEAPH
QNGECHPNEKGSVNMDLD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

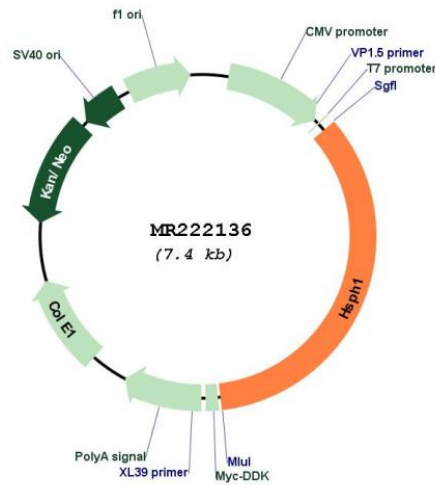
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_013559
ORF Size:	2577 bp
OTI Disclaimer:	<p>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 or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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.
RefSeq:	NM_013559.2 , NP_038587.2
RefSeq Size:	3478 bp
RefSeq ORF:	2577 bp
Locus ID:	15505
UniProt ID:	Q61699
Cytogenetics:	5 89.18 cM
MW:	96.4 kDa
Gene Summary:	Acts as a nucleotide-exchange factor (NEF) for chaperone proteins HSPA1A and HSPA1B, promoting the release of ADP from HSPA1A/B thereby triggering client/substrate protein release (By similarity). Prevents the aggregation of denatured proteins in cells under severe stress, on which the ATP levels decrease markedly. Inhibits HSPA8/HSC70 ATPase and chaperone activities (PubMed:14644449, PubMed:15292236).[UniProtKB/Swiss-Prot Function]