

Product datasheet for **RR213187**

Hsph1 (NM_001011901) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hsph1 (NM_001011901) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hsph1
Synonyms:	Hsp105
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide
Sequence:**

>RR213187 representing NM_001011901
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGGTGGTTGGGCTAGACGTGGGCTCGCAGAGCTGCTACATTGCAGTGGCACGGGCCGGGGCATCG
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Protein Sequence: >RR213187 representing NM_001011901
Red=Cloning site Green=Tags(s)

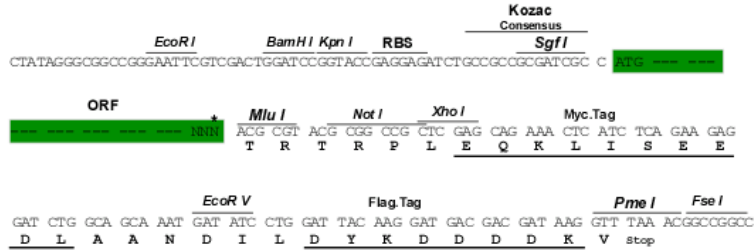
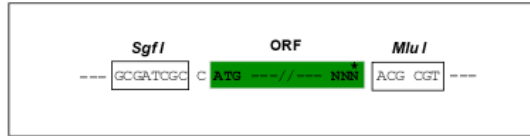
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Restriction Sites: Sgfl-MluI

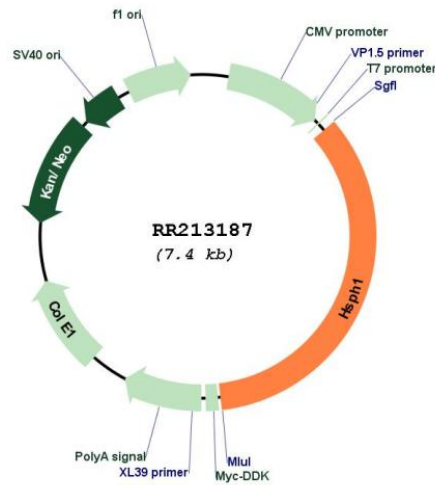
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001011901
ORF Size:	2574 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.
RefSeq:	NM_001011901.1 , NP_001011901.1
RefSeq Size:	3453 bp
RefSeq ORF:	2577 bp
Locus ID:	288444
UniProt ID:	Q66HA8
Cytogenetics:	12p11
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 substrate release. 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.[UniProtKB/Swiss-Prot Function]