

## Product datasheet for **RC226262**

### **SARDH (NM\_001134707) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	SARDH (NM_001134707) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SARDH
Synonyms:	BPR-2; DMGDHL1; SAR; SARD; SDH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC226262 representing NM\_001134707  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCTCACTGAGCCGAGCCCTACGTGTGGCTGCTGCCACCCTCGCCAGAGCCCTACCCGGGCATGG  
 GGCCATGCAACCTGTCCAGCGCAGCTGGCCCCACAGCCGAGAAGAGTGTGCCATATCAGCGGACCCTGAA  
 GGAGGGACAGGGCACCTCGGTGGTGGCCCAAGGCCAAGCCGGCCCTGCCAGCACGGCCAACGTGGTGT  
 GTCATTGGTGGAGGCAGCTTGGGCTGCCAGACCCTGTACCACCTGGCCAAGCTGGGCATGAGTGGGGCGG  
 TGCTGCTGGAGCGGGAGCGGCTGACCTCCGGGACCACCTGGCACACGGCAGGCCTGCTGTGGCAGCTGCC  
 GCCCAGTGACGTGGAGGTGGAGCTTCTGGCCCACTCGCGGGTGGTGGAGCCGGGAGCTGGAGGAGGAG  
 ACGGGACTACACACGGGCTGGATCCAGAATGGGGCCCTTTCATCGCGTCAACCCGGCAGCGCTGGACG  
 AGTACAAGAGGCTCATGTCGCTGGGCAAGGCGTATGGTGTGGAATCCCATGTGCTGAGCCCGGCAGAGAC  
 CAAGACTCTGTACCCGCTGATGAATGTGGACGACCTCTACGGGACCCTGTATGTGCCGCAGCAGCGTACC  
 ATGGACCCCGCTGGCACCTGTACCACCCTCGCCAGGGCAGCTTCTGCCGAGGAGCACAGGTCATTGAGA  
 ACTGCCCAGTGACCGGCATTTCGTGTGGACGGATGATTTTGGGGTGGCGGGTGGCGGGTGGGAGAC  
 TCAGCATGGTTCCATCCAGACACCCTGCGTGGTCAACTGTGCAGGAGTGTGGGCAAGTGTGTGGGCCGG  
 ATGGCTGGAGTCAAGTCCCCTGGTGGCCATGCACCATGCCTATGTCGTACCGAGCGCATCGAGGGGA  
 TTCAGAACATGCCAATGTCCTGTATGATGCCTCTGTCTACCTCCGCTCCAAGGGGATGCCTTGTCT  
 TGTGGTGGCTATGAGGCCAACCCATCTTTGGGAGGAGGTGTCAGACAAGTTTGCCTTCGGCCTCTTT  
 GACCTGGACTGGGAGGTGTTACCCAGCACATTGAAGCGCCATCAACAGGGTCCCCTGATGGAGAAGA  
 CAGGAATCAAGTCCAGGTCTCGGCCCTGAATCCTTACGCGCCACACAAGCCCTGATGGGGAGGC  
 ACCTGAGCTCCGAGGGTTCTTCTGGGCTGTGGCTTCAACAGCGCAGGAATGATGCTGGTGGTGGCTGT  
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 GCTTCCATCACTCGTCAACGACACCCCGCTGGATCCGAGAGCGAAGCCATGAGTCTACGCCAAGAA  
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 GAACTCCTTGGACAAGGCTGCGTGTCCAGGAGCGGCATGGTGGGAGCGACCCGGATGGTTTCATCCCC  
 GAGGCCCAGCTCCGCTCCTCGAGTACGACTACTACGGGGCTTACGGGAGCCGCGCACGAGGACTACGC  
 CTACCGCAGGCTGCTGGCAGACGAGTACACCTTCGCCTTCCCGCCACACGACACGATCAAGAAGGAG  
 TGCTTGGCTGCAGAGGGCCCGCTGTGTTGACATGTCCTACTTCGGGAAGTTCTACCTGGTGGGGC  
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 CACGTGCATGCTCAACCACCGTGGGGGACCGAGAGTGACCTGACTGTCAGCCGCCTGGCACCCAGCCAC  
 CAGGCCTCCCCGCTGGCCCCCGCTTTGAAGGGGACGGTTACTACCTGGCCATGGGCGGGGCGTGGCCC  
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 GTACCGGGCTGTGATGGCCGCGGGTGCCAAGCACGGCCTCATCAACGCAGGGTACCGGCCCATCGACTCC  
 CTGAGCATTGAGAAAGGCTACCGCACTGGCACGCGGACCTGCGGCCAGACGACAGCCCCCTGGAGGCAG  
 GCCTGGCCTTACCTGCAAGCTCAAGTCGCGGGTGCCTTCTGGGGAGGAGGCCTGGAGCAGCAGCG  
 GGCCGACGGCCTCCGCGGCGCCTGGTGTGCTTACCATGGAGGACAAAGTACCCATGTTTGGCCTGGAG  
 GCCATCTGGAGGAACGGCCAAGTGGTGGCCATGTCCGGAGGGCTGACTTTGGGTTCGCCATCGACAAGA  
 CCATCGCCTACGGTTACATCCATGACCCACGGGTGGGCCGTCTCGCTGGACTTTGTGAAGAGCGGGGA  
 CTATGCCCTGGAGAGAATGGGGTGACCTATGGTGGCCAGGCTCACCTGAAGTCGCCCTTCGACCCCAAC  
 AACAAGAGGGTGAAGGAATCTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC226262 representing NM\_001134707  
 Red=Cloning site Green=Tags(s)

MASL SRALRVAAHPRQSPTRGMGPCNLSSAAGPTAEKSVPYQRTLKEGQGTSVVAQGPSRPLSTANVV  
 VIGGGSLGCQTL YHLAKLGM SGAVLLERERL TSGTTWHTAGLLWQLRPSDVEVELLAHTRRVVSRELEEE  
 TGLHTGWIQNGGLFIASNRQRLDEYKRLMSLGKAYGVESHVLSPAETKTL YPLMNVDL YGTL YPHDGT  
 MDPAGTCTTLARAASARGAQVIENCPVTGIRVWTD DFGVRRVAGVETQHGSIQTPCVVNCAGVWASAVGR  
 MAGVKVPLVAMHHAYVVTERIEGIQNMPNVRDHDASVYLRLQGDALSVGGYEANPIFWEEVSDKFAFGLF  
 DLDWEVFTQHIEGAINRVPVLEKTGIKSTVCGPESFTPDHKPLMGEAPELRGFFL GCGFNSAGMMLGGGC  
 GQELAHWIIHGRPEKDMHGYDIRRFHSLTDHPRWIRERSHESYAKNYSVVFPHDEPLAGRNMRDPLHE  
 ELLGQGCVFQERHGWERPWFHPRGPAPVLEYDYYGAYGSRAHEDYARRLLADEYTFAPPHDITKKE  
 CLACRGA AAVFDMSYFGKFYL VGLDARKAADWLF SADVSRPPGSTVYTCMLNHRGGTESDLTVSRLAPSH  
 QASPLAPAFEGDGYLLAMGGAVAQHNWSHITTVLQDQK SQCQLIDSS EDLGMISIQGPASRAILQEVLDA  
 DLSNEAFPFFSTHKLLRAAGHLVRAMR LSFV GELGWELHIPKASCVPVYRAVMAAGAKHGLINAGYRAIDS  
 LSIEKGYRHHADLRPDDSPLEAGLAFTCKLKSPVPFLGREALEQQAAGLRRRLVCFTMEDKVPFMGLE  
 AIWRNGQVVGHVRRADF GAIDKTIAYGYIHDP SGGPVSLDFVKSGDYALERMGVTYGAQHLKSPFDPN  
 NKRVKGIY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

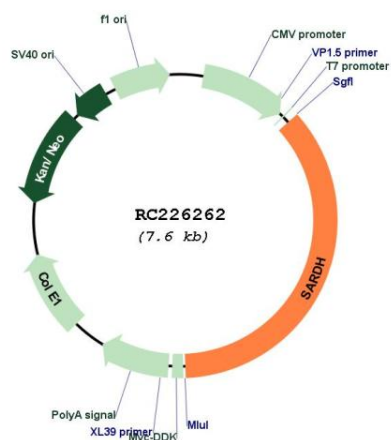


**ACCN:** NM\_001134707

**ORF Size:** 2754 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001134707.2</a>
<b>RefSeq ORF:</b>	2757 bp
<b>Locus ID:</b>	1757
<b>UniProt ID:</b>	<a href="#">Q9UL12</a>
<b>Cytogenetics:</b>	9q34.2
<b>Protein Pathways:</b>	Glycine, serine and threonine metabolism, Metabolic pathways
<b>MW:</b>	101.04 kDa
<b>Gene Summary:</b>	This gene encodes an enzyme localized to the mitochondrial matrix which catalyzes the oxidative demethylation of sarcosine. This enzyme is distinct from another mitochondrial matrix enzyme, dimethylglycine dehydrogenase, which catalyzes a reaction resulting in the formation of sarcosine. Mutations in this gene are associated with sarcosinemia. Alternatively spliced transcript variants have been described. [provided by RefSeq, Oct 2008]

Product images:



Circular map for RC226262