

Product datasheet for **RC219173**

SARDH (NM_007101) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SARDH (NM_007101) 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:**

>RC219173 representing NM_007101
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCTCACTGAGCCGAGCCCTACGTGTGGCTGCTGCCACCCTCGCCAGAGCCCTACCCGGGCATGG
 GGCCATGCAACCTGTCCAGCGCAGCTGGCCCCACAGCCGAGAAGAGTGTGCCATATCAGCGGACCCTGAA
 GGAGGGACAGGGCACCTCGGTGGTGGCCCAAGGCCAAGCCGGCCCTGCCAGCACGGCCAACGTGGTGT
 GTCATTGGTGGAGGCAGCTTGGGCTGCCAGACCCTGTACCACCTGGCCAAGCTGGGCATGAGTGGGGCGG
 TGCTGCTGGAGCGGGAGCGGCTGACCTCCGGGACCACCTGGCACACGGCAGGCCTGCTGTGGCAGCTGCG
 GCCCAGTGACGTGGAGGTGGAGCTTCTGGCCCACTCGCGGGTGGTGGAGCCGGGAGCTGGAGGAGGAG
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 GACCTGGACTGGGAGGTGTTACCCAGCACATTGAAGCGCCATCAACAGGGTCCCCTGCTGGAGAAGA
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 GCTTCCATCACTCGTCAACGACACCCCGCTGGATCCGAGAGCGAAGCCATGAGTCTACGCCAAGAA
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 AACAAGAGGGTGAAGGAATCTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC219173 representing NM_007101
 Red=Cloning site Green=Tags(s)

MASL SRALRVAAHPRQSPTRGMGPCNLSSAAGPTAEKSVVPYQRTLKEGQGTSVVAQGPSRPLPSTANVV
 VIGGGSLGCQTL YHLAKLGM SGAVLLERERL TSGTTWHTAGLLWQLRPSDVEVELLAHTRRVVSRELEEE
 TGLHTGWIQNGGLFIASNRQRLDEYKRLMSLGKAYGVESHVLSPAETKTL YPLMNVDDL YGTL YVPHDGT
 MDPAGTCTTLARAASARGAQVIENCPVTGIRVWTD DFGVRRVAGVETQHGSIQTPCVVNCAGVWASAVGR
 MAGVKVPLVAMHHAYVVTERRIEGIQNMPNVRDHDASVYLRLQGDALSVGGYEANPIFWEEVSDKFAFGLF
 DLDWEVFTQHIEGAINRVPVLEKTGIKSTVCGPESFTDPHKPLMGEAPELRGFFLGCGFNSAGMMLGGGC
 GQELAHWIIHGRPEKDMHGYDIRRFHSLTDHPRWIRERSHESYAKNYSVVFPHDEPLAGRNMRDPLHE
 ELLGQGCVFQERHGWERPWFHPRGPAPVLEYDYYGAYGSRAHEDYARRLLADEYTFAPPHDITKKE
 CLACRGA AAVFDM SYFGKFYL VGLDARKAADWLF SADVSRPPGSTVYTCMLNHRGGTESDLTVSRLAPSH
 QASPLAPAFEGDGYLLAMGGAVAQHNWSHITTVLQDQKSCQLIDSSEDLGMISIQGPASRAILQEVLDA
 DLSNEAFPSTHKLLRAAGHLVRAMR LSFV GELGWELHIPKASCVPVYRAVMAAGAKHGLINAGYRAIDS
 LSIEKGYRHHADLRPDDSPLEAGLAFTCKL KSPVPFLGREALEQQAAGLRRLVCFTMEDKVPFMFGL
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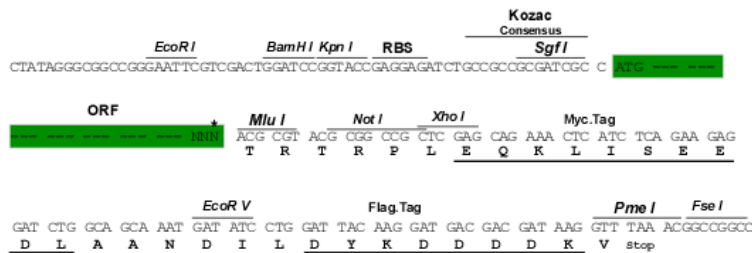
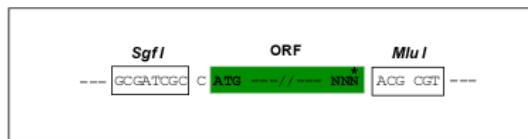
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8021_g10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



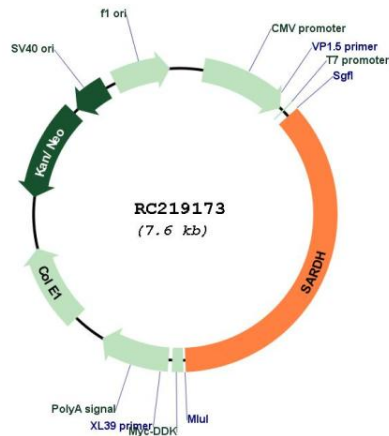
* The last codon before the Stop codon of the ORF

ACCN: NM_007101

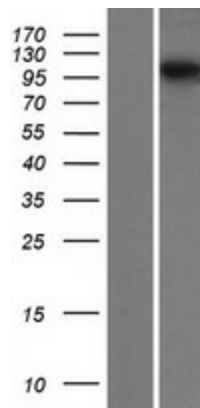
ORF Size: 2754 bp

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_007101.4
RefSeq Size:	3363 bp
RefSeq ORF:	2757 bp
Locus ID:	1757
UniProt ID:	Q9UL12
Cytogenetics:	9q34.2
Protein Pathways:	Glycine, serine and threonine metabolism, Metabolic pathways
MW:	101.04 kDa
Gene Summary:	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 RC219173



Western blot validation of overexpression lysate (Cat# [LY416196]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219173 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).