OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC217814

SDS (NM_006843) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SDS (NM_006843) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SDS
Synonyms:	SDH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC217814 representing NM_006843
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGTCTGGAGAACCCCTGCACGTGAAGACCCCCATCCGTGACAGCATGGCCCTGTCCAAAATGGCCG
GCACCAGCGTCTACCTCAAGATGGACAGTGCCCAGCCCTCCGGCTCCTTCAAGATCCGGGGCATTGGGCA
CTTCTGCAAGAGGTGGGCCAAGCAAGGCTGTGCACATTTTGTCTGCTCCTCGGCGGGCAACGCAGGCATG
GCGGCTGCATATGCGGCCAGGCAACTCGGCGTCCCCGCCACCATCGTGGTGCCCAGCACCACACCTGCTC
TCACCATTGAGCGCCTCAAGAATGAAGGTGCCACAGTCAAGGTGGTGGGTGAGTTATTGGATGAAGCCTT
CGAGCTGGCCAAGGCCCTAGCGAAGAACAACCCGGGTTGGGTCTACATTCCCCCCTTTGATGACCCCCTC
ATCTGGGAAGGCCACGCTTCCATCGTGAAAGAGCTGAAGGAGACACTGTGGGAAAAGCCGGGGGCCATCG
CGCTGTCAGTGGGCGGCGGGGGCCTGCTGTGTGGAGTGGTCCAGGGGCTGCAGGAGGTGGGCTGGGGGGA
CGTGCCTGTCATCGCCATGGAGACTTTTGGTGCCCACAGCTTCCACGCTGCCACCACCGCAGGCAAACTT
GTCTCCCTGCCCAAGATCACCAGTGTTGCCAAGGCCCTGGGCGTGAAGACTGTGGGGGCTCAGGCCCTGA
AGCTGTTTCAGGAACACCCCATTTTCTCTGAAGTTATCTCGGACCAGGAGGCTGTGGCCGCCATTGAGAA
GTTCGTGGATGATGAGAAGATCCTGGTGGAGCCCGCCTGCGGGGCAGCCCTGGCCGCTGTCTATAGCCAC
GTGATCCAGAAGCTCCAACTGGAGGGGAATCTCCGAACCCCGCTGCCATCCCTCGTGGTCATCGTCTGCG
GGGGCAGCAACATCAGCCTGGCCCAGCTGCGGGCGCTCAAGGAACAGCTGGGCATGACAAATAGGTTGCC
CAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC217814 representing NM_006843
Red=Cloning site Green=Tags(s)

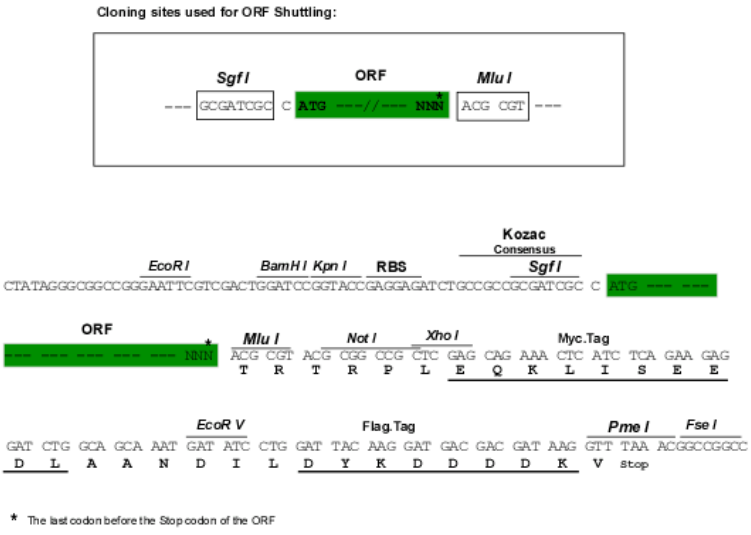
MMSGEPLHVKTPIRDSMALSKMAGTSVYLKMDSAQPSGSFKIRGIGHFCKRWAKQGCAHFVCSSAGNAGM
AAAYAARQLGVPATIVVPSTTPALTIERLKNEGATVKVVGELLDEAFELAKALAKNNPGWVYIPPFDDPL
IWEGHASIVKELKETLWEKPGAIALSVGGGGLLCGVVQGLQEVGWGDVPVIAMETFGAHSFHAATTAGKL
VSLPKITSVAKALGVKTVGAQALKLFQEHPIFSEVISDQEAVAAIEKFVDDEKILVEPACGAALAAVYSH
VIQKLQLEGNLRTPLPSLVVIVCGGSNISLAQLRALKEQLGMTNRLPK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6482_b06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006843

ORF Size: 984 bp

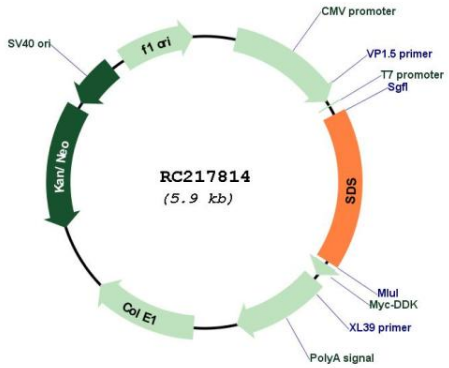
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

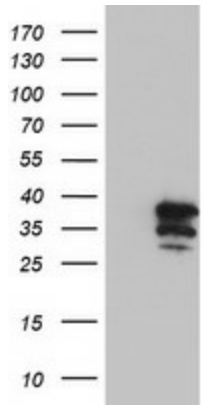
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	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_006843.3
RefSeq Size:	1620 bp
RefSeq ORF:	987 bp
Locus ID:	10993
UniProt ID:	P20132
Cytogenetics:	12q24.13
Domains:	PALP
Protein Pathways:	Cysteine and methionine metabolism, Glycine, serine and threonine metabolism, Metabolic pathways
MW:	34.4 kDa
Gene Summary:	This gene encodes one of three enzymes that are involved in metabolizing serine and glycine. L-serine dehydratase converts L-serine to pyruvate and ammonia and requires pyridoxal phosphate as a cofactor. The encoded protein can also metabolize threonine to NH4+ and 2-ketobutyrate. The encoded protein is found predominantly in the liver. [provided by RefSeq, Jul 2008]

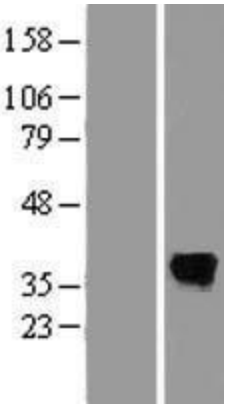
Product images:



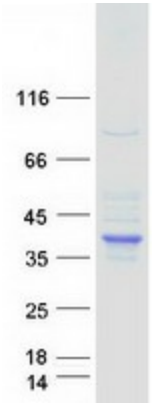
Circular map for RC217814



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SDS (Cat# RC217814, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SDS(Cat# [TA503943]). Positive lysates [LY416388] (100ug) and [LC416388] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416388]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217814 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SDS protein (Cat# [TP317814]). The protein was produced from HEK293T cells transfected with SDS cDNA clone (Cat# RC217814) using MegaTran 2.0 (Cat# [TT210002]).