

Product datasheet for RC228880

S adenosylhomocysteine hydrolase (AHCY) (NM_001161766) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	S adenosylhomocysteine hydrolase (AHCY) (NM_001161766) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AHCY
Synonyms:	adoHcyase; SAHH
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC228880 representing NM_001161766 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCTGACAACTGCCCTACAAAGTCGCCGACATCGGCCTGGCTGCCTGGGGACGCAAGGCCCTGGACA
TTGCTGAGAACGAGATGCCGGCCCTGATCGGTATGCGGGAGCGGTA CTGGCCTCAAGCCACTGAAGGG
CGCCCGCATCGCTGGCTGCCTGCACATGACCGTGGAGACGGCCGTCTCATTGAGACCCTGTCACCTG
GGTGTGAGGTGCAGTGGTCCAGCTGCAACATCTTCTCCACCCAGGACCATGCGGCGGCTGCCATTGCCA
AGGCTGGCATTCCGGTGTATGCCTGGAAGGGCGAAACGGACGAGGAGTACCTGTGGTGCATTGAGCAGAC
CCTGTACTTCAAGGACGGGCCCTCAACATGATTCTGGACGACGGGGGCGACCTACCAACCTCATCCAC
ACCAAGTACCCGAGCTTCTGCCAGGCATCCGAGGCATCTCTGAGGAGACCACGACTGGGGTCCACAACC
TCTACAAGATGATGGCCAATGGGATCCTCAAGGTGCTGCCATCAATGTCAATGACTCCGTCACCAAGAG
CAAGTTTGACAACCTCTATGGCTGCCGGGAGTCCCTCATAGATGGCATCAAGCGGGCCACAGATGTGATG
ATTGCCGGCAAGGTAGCGGTGGTAGCAGGCTATGGTGTGTGGCAAGGGCTGTGCCAGGCCCTGCGGG
GTTTCGGAGCCCGGTCATCATCACCGAGATTGACCCCATCAACGCACTGCAGGCTGCCATGGAGGGCTA
TGAGGTGACCACCATGGATGAGGCCTGTCAGGAGGGCAACATCTTTGTCACCACCACAGGCTGTATTGAC
ATCATCTTGGCCGGCACTTTGAGCAGATGAAGGATGATGCCATTGTGTGTAACATTGGACACTTTGACG
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GTATCGGTTGAAGAATGGGCGCCGCATCATCTGCTGGCCGAGGGTGGCTGGTCAACCTGGGTTGTGCC
ATGGGCCACCCAGCTTCGTGATGAGTAACTCCTTACCAACAGGTGATGGCGCAGATCGAGCTGTGGA
CCCATCCAGACAAGTACCCGTTGGGGTTCATTTCTGCCAAGAAGCTGGATGAGGCAGTGGCTGAAGC
CCACCTGGGCAAGCTGAATGTGAAGTTGACCAAGCTAACTGAGAAGCAAGCCAGTACCTGGGCATGTCC
TGTGATGGCCCTTCAAGCCGGATCACTACCGTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC228880 representing NM_001161766
 Red=Cloning site Green=Tags(s)

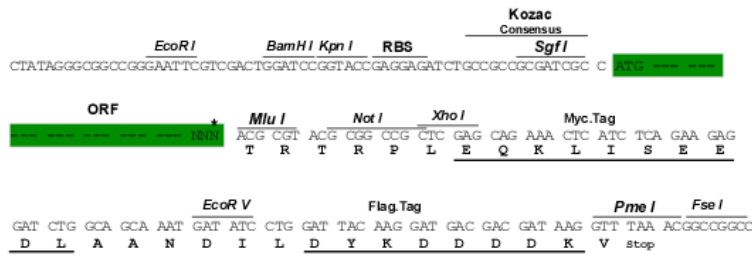
MSDKLPYKVADIGLAAWGRKALDIAENEMPLMRMRERYSASKPLKGARIAGCLHMTVETAVLIETLVTL
 GAEVQWSSCNIFSTQDAAAAIAKAGIPVYAWKGETDEEYLWCIEQTLYFKDGPLNMILDDGGDLTNLIH
 TKYPQLLPGIRGISEETTTGVHNLKMMANGILKVPAINVNDVTKSKFDNLYGCRESLIDGIKRATDVM
 IAGKVAVVAGYGDVKGCAQALRGFGARVIITEIDPINALQAAMEGYEVTMDEACQEGNIFVTTTGCID
 IILGRHFEQMKDDAIVCNIGHFDVEIDVKWLNENAVEKVNKPKQVDYRLKNGRRIILLAEGRLVNLGCA
 MGHPSFVMSNSFTNQVMAQIELWTHDPKYPGVGHFLPKKLDEAVAEHLGKLVNKLTKLTKQAQYLGMS
 CDGPFKPDHYRY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:
Cloning Scheme:

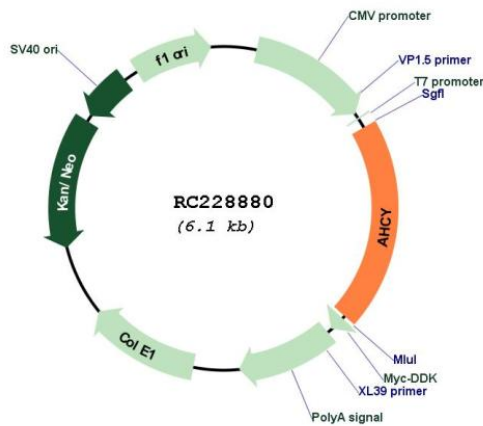
SgfI-MluI

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001161766

ORF Size:	1299 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_001161766.1 , NP_001155238.1
RefSeq Size:	2375 bp
RefSeq ORF:	1215 bp
Locus ID:	191
UniProt ID:	P23526
Cytogenetics:	20q11.22
Protein Families:	Druggable Genome
Protein Pathways:	Cysteine and methionine metabolism, Metabolic pathways, Selenoamino acid metabolism
MW:	47.7 kDa
Gene Summary:	S-adenosylhomocysteine hydrolase belongs to the adenosylhomocysteinase family. It catalyzes the reversible hydrolysis of S-adenosylhomocysteine (AdoHcy) to adenosine (Ado) and L-homocysteine (Hcy). Thus, it regulates the intracellular S-adenosylhomocysteine (SAH) concentration thought to be important for transmethylation reactions. Deficiency in this protein is one of the different causes of hypermethioninemia. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2009]