

Product datasheet for **SC314936**

AASS (NM_005763) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AASS (NM_005763) Human Untagged Clone
Tag:	Tag Free
Symbol:	AASS
Synonyms:	LKR/SDH; LKRSDH; LORS DH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



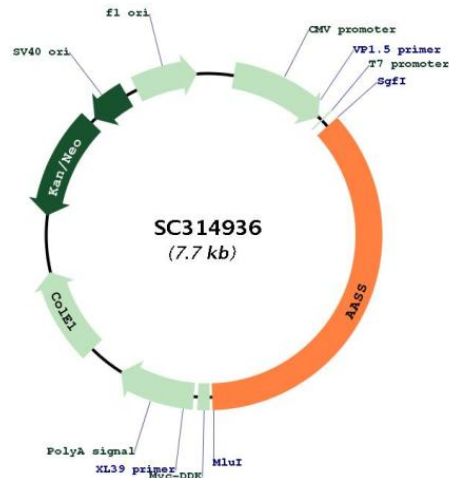
[View online »](#)

Fully Sequenced ORF: >SC314936 representing NM_005763.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

```

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGCTCCAAGTACATAGGACTGGACTGGGCAGGCTGGGGTCAGCCTCTCCAAGGTCTTCACCACAAA
GCTGTGTTGGCCGTCGGAGGGAGGATGTGAACGCCTGGGAGAGAAGGGCCCGCTAGCTCCAAGCAC
ATCAAAGGCATCACCAATCTGGGATACAAGGCTTGATACAGCCTTGAATCGGGCGGCCATTATGAT
AAGGACTATGTCAAAGCTGGTGGCATTCTCAGGAGGATATTTCTGAAGCTTGTCTAATTTTAGGAGTT
AAAAGACCTCCAGAGGAAAAATTAATGTCCAGGAAGACTATGCATTTTTCTCCACACAATAAAAGCT
CAGGAGGCCAATATGGGCTTGTGGATGAGATTCTAAACAGGAAATTCGCCTTATTGATTATGAGAAA
ATGGTGGATCATAGAGGAGTACGGGTAGTGGCATTGGACAGTGGGCTGGTGTGGCAGGAATGATCAAC
ATTTTACATGGAATGGGTTAAGGCTCCTTGCTTTGGGACATCACACACCTTTTATGCACATTGGCATG
GCTCATAACTACAGGAATAGCAGTCAAGCTGTGCAAGCTGTCGTGATGCTGGCTATGAAATATCTTTG
GGTTTGATGCCTAAGTCAATAGGACCTTAACATTTGTGTTTACAGGAAGTGGTAAATGTTTCTAAGGGA
GCCAAGCAATCTTTAATGAGCTACCTTGTAATATGTGGAGCCCATGAATTAAGAAGTTTCCCAA
ACTGGAGACCTCAGAAAAGTGTATGGGACGGTGTAAAGTCGTATCATCATCTTGTGAGGAAAACAGAT
GCTGTGTATGATCCTGCAGAGTATGACAAAATCCGGAGCGCTACATAAGTCGTTTTAATACTGATATT
GCACCCTATACAACCTTGCTTAATTAATGGAATCTACTGGGAACAAAACACTCCTCGCCTCCTAACCCGC
CAAGATGCTCAGAGTCTCCTGGCTCCGGCAAGTTCTCACCTGCTGGTGTGGAAGGCTGCCTGCATTA
CCACACAACTCGTGGCAATATGTGACATTTAGCTGACACAGGAGGCTATAGAGTTTATGACTGAG
TGTACAACAATAGAGCATCCCTTTTGCATGTATGATGCAGACCAGCATATTATTCATGACAGTGTGAA
GGCTCGGGGATCCTGATGTGTTCCATTGACAATTTCCGGCACAGCTCCCAATTGAAGCTACAGAAATGC
TTTGGAGACATGCTTTACCCTTATGTTGAAGAAATGATATTATCAGACGGACACAGCCTCTTGAAAGT
CAGAATTTTTCTCCTGTGGTGGAGAGATGCAAGTATTACATCCAACGGTACATTACCTGATAAATATAAA
TATATCCAGACTCCGGGAGAGCAGGGAACGTGCTCAGTCACTTTCAATGGGCACCAGGAGAAAGGTT
TTGGTTCTGGATCTGGCTACATATCTGAGCCTGTATTAGAATTTTATCAAGAGATGGCAATATAGAA
ATAACAGTAGGATCTGACATGAAGAATCAAATTGAACAGTTAGGCAAGAAATATAATATTAATCCTGTT
AGCATGGACATTTGTAACAAGAAGAGAAGCTGGGCTTCTTGGTGGCAAAACAGGATCTTGCATCAGC
TTGTTGCCTTATGATTGCACCCTCTTGTGGCCAAGCCTGCATCACAACAAAGTTAACATGGTCACT
GCAAGCTACATCACACCAGCACTAAAAGAATTGAAAAGAGTGTGGAAGATGCTGGCATCACAATCATT
GGTGAATTTGGGATTTGACCCTGGTCTGGATCACATGTTAGCAATGGAAACAATAGATAAAGCCAAGGAA
GTGGGAGCCACGATTGAATCATATATTTCTACTGTGGTGGGCTTCCAGCCCTGAACATTCAAAACAT
CCATTGAGATATAAATTTAGCTGGAGTCCAGTGGGAGTTTTGATGAATGTAATGCAGTCTGCCACCTAT
CTGCTCGATGGAAAGGTTGTGAATGTTGCAGGAGGCATCTCCTTTCTTGATGCCGTTACGTCCATGGAT
TTTTTCCAGGATTAATTTGGAAGGCTATCCTAACAGAGACAGTACGAAATATGCTGAGATTTATGGC
ATTTCTTCTGCTCACACTTTGTTGGGGGGACACTGAGATATAAGGGATATATGAAAGCTTTGAATGGA
TTTGTAATAATAGGCTTTATAAACAGAGAAGCGCTTCTGCCTTTAGACCTGAGGCCAACCTCTCACC
TGGAAACAACCTCTGTGACCTAGTTGGGATTTACCCTCCTCTGAGCATGATGTGTTGAAGGAAGCT
GTTCTTAAGAACTAGGAGGAGACAATACCCAGTTGGAGGCTGCTGAATGGTTGGGCTTACTTGGGGAT
GAACAAGTTCCTCAGGCAGAGTCCATTCTGGATGCCCTCTCCAAGCATTGGTCAATGAAGCTTCTCTAT
GGTCTGAAGAAAAGATATGATTGTGATGAGAGACAGCTTTGGAATCAGACATCCTTCTGGACATTTA
GAACATAAAACGATTGATCTTGTGGCTTATGGGACATCAATGGCTTTTCAGCCATGGCTAAAACCGTG
GGGTTACCACCGCCATGGCAGCCAAAATGTTGCTTATGGTGAATTTGGAGCCAAAGGCCAATGGGG
CCCTTTTCAAAGGAGATCTATGGACCAATATTGGAGCGAATTAAGCAGAAGGCATTATATACTACA
CAGAGTACAATTAACCATAA
ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
```

Restriction Sites: SgfI-MluI

Plasmid Map:


ACCN: NM_005763

Insert Size: 2781 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_005763.3
RefSeq Size:	5887 bp
RefSeq ORF:	2781 bp
Locus ID:	10157
UniProt ID:	Q9UDR5
Cytogenetics:	7q31.32
Domains:	Saccharop_dh, AlaDh_PNT_C, AlaDh_PNT_N
Protein Families:	Druggable Genome
Protein Pathways:	Lysine biosynthesis, Lysine degradation, Metabolic pathways
MW:	102.1 kDa
Gene Summary:	This gene encodes a bifunctional enzyme that catalyzes the first two steps in the mammalian lysine degradation pathway. The N-terminal and the C-terminal portions of this enzyme contain lysine-ketoglutarate reductase and saccharopine dehydrogenase activity, respectively, resulting in the conversion of lysine to alpha-aminoadipic semialdehyde. Mutations in this gene are associated with familial hyperlysinemia. [provided by RefSeq, Jul 2008]