

Product datasheet for **RC224831**

AASS (NM_005763) Human Tagged ORF Clone

Product data:

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



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ORF Nucleotide Sequence:

>RC224831 representing NM_005763
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGCAAGTACATAGGACTGGACTGGCAGGCTGGGGTCCAGCCTCTCCAAGGTCTTACCACAAG
 CTGTGTTGGCCGTCGGAGGGAGGATGTGAACGCCTGGGAGAGAAGGGCCCGCTAGCTCCAAGCACAT
 CAAAGGCATACCAATCTGGGATACAAGTCTTGATACAGCCTTCGAATCGGCGGCCATTCATGATAAG
 GACTATGTCAAAGCTGGTGGCATTCTTCAGGAGGATATTTCTGAAGCTTGTCTAATTTTAGGAGTTAAAA
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 GGCCAATATGGGCTTGTGGATGAGATTCTAAAACAGGAAATTCGCCTATTGATTATGAGAAAAATGGT
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 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RC224831 representing NM_005763
 Red=Cloning site Green=Tags(s)

MLQVHRTGLGRLGVSLKGLHHKAVLAVRREDVNAWERRAPLAPKHIKGITNLGYKVLIQPSNRRRAIHDK
 DYVKAGGILQEDI SEACLILGVKRPPEEKLMRSRKYAFFSHTIKAQEANMGLLDEILKQEIRLIDYEKMV
 DHRGVRVAVFGQWAGVAGMINILHGMGLRLLALGHHTPFMHIGMAHNYRNSQAVQAVRDAGYEISLGLM
 PKSIGPLTFVFTGTGNVSKGAQAI FNELPCEYVEPHELKEYSQTGDLRKYVGTVLSRHHHLVRKTDVYD
 PAEYDKHPERYISRFNTDIAPYTTCLINGIYWEQNTPRLLTRQDAQSLLAPGKFS PAVGVEGCPALPHKLV
 AICDISADTGGSEIFMTECTTIEHPFCMYDADQHIHDSVEGSGILMCSIDNLPALPIEATECFDMLY
 PYVEEMILSDATQPLESQNFSPVVRDAVITSNGTLPDKYKIQTRESRERAQSLSMGTRRKVVLVLSGY
 ISEPVLEYL SRDGNIEITVGSMDKNQIEQLGKKYNINPVSM DICKQEEKLGFLVAKQDLVISLLPYVLHP
 LVAKACITNKVMVTASYITPALKKELEKSVEDAGITTIIGELGLDPLDHMLAMETIDKAKEVGATIESYI
 SYCGGLPAPEHSNNPLRYKFSWSPVGLMNMVQSATYLLDGKVVNVAGGISFLDAVTSMDFFPGLNLEGY
 PNRDSTKYAEIYGISSAHTLLRGT LRYGYMKALNGFVKLGLINREALPAFRPEANPLTWKQLLCDLVGI
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 SFGIRHPSGHLHKITIDL VAYG DINGFSAMAKTVGLPTAMAAKMLLDGEIGAKGLMGPF SKEIYGPILER
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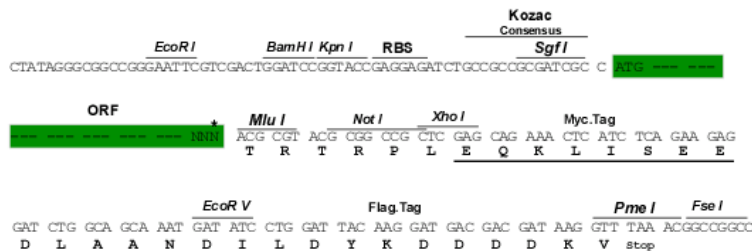
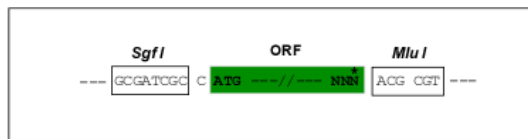
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8044_f01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



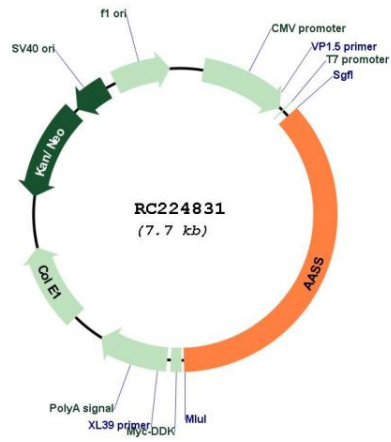
* The last codon before the Stop codon of the ORF

ACCN: NM_005763

ORF Size: 2778 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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_005763.4
RefSeq Size:	3233 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 kDa
Gene Summary:	<p>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-amino adipic semialdehyde. Mutations in this gene are associated with familial hyperlysinemia. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RC224831