

Product datasheet for **RC205091**

AASDHPPT (NM_015423) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AASDHPPT (NM_015423) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AASDHPPT
Synonyms:	AASD-PPT; ACPS; CGI-80; LYS2; LYS5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205091 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTTTTCCCTGCCAAACGGTTCTGCTTGGTGCCATCCATGGAGGGCGTGCCTGGGCCTTTCTCGCG
GCCTTGGCTGCCGAGCCGAGCCGAATGGCTGCTGGCAGTGCATCGATTCAGCCCGAGGAGAAGGAGCG
CATTGGCCAGTTCGTCTTTGCCCGGACGCTAAGGCAGCCATGGCTGGTCTGATGATAAGGAAATTA
GTTGCAGAGAAATGAATATCCCTTGAATCATATTCGTTGCAAAGAACTGCAAAGGAAAACAGTTC
TTGCAAAGGACTCATCGAATCCTTACCCGAATTTCAACTTAAACATCTCTCATCAAGGAGACTATGCAGT
GCTTGCTGCTGAACCTGAGCTGCAAGTTGGAATTGATATAATGAAGACTAGTTTTCCAGGTCGTGGTTCA
ATTCCAGAATCTTTTATATTATGAAAAGAAAGTTTACCAACAAAGAATGGGAAACAATCAGAAGCTTTA
AGGATGAGTGGACTCAGCTGGATATGTTTTATAGGAATTGGGCACTTAAGGAAAGCTTCATAAAGCCAT
TGGTGTGGACTAGGATTTGAATTGCAGCGGCTTGAATTTGATCTATCTCCATTAACCTTGGATATAGGC
CAAGTTTATAAAGAAACACGTTTATTCTGGATGGAGAGGAAGAAAAGAATGGGCATTTGAGGAAAGCA
AAATAGATGAGCACCATTTTGTGCAGTTGCTCTTAGGAAACCCGATGGATCTAGACATCAGGATGTTCC
ATCTCAGGATGATTCAAACCAACCCAGAGGCAATTTACTATTCTCAACTTAAATGATTTAATGTCACT
GCCGTTCCATGACACCTGAAGATCCTTCATTTGGGACTGTTTTGCTTCACAGAAGAAATTCGAATAC
GAAATGGTACAAAGTCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC205091 protein sequence
Red=Cloning site Green=Tags(s)

MVFPAKRFCLVPSMEGVRWAFSCGTWLP SRAEWLLAVRSIQPEEKERIGQFVFARDAKAAMAGRLMIRKL
 VAEKLNIPWNHIRLQRTAKGKPV LAKDSSNPYPNFNFNISHQGDYAVLAAEPELQV GIDIMKTSFPGRGS
 IPEFFHIMKRKF TNKEWETIRSFKDEWTQLDMFYRNWALKESFIKAI GVLGFELQRL EFDLSPLNLDIG
 QVYKETRLFLDGE EEWAFEE SKIDEHHFVAVALRKPDGSRHQDVPSQDDSKPTQRQFTILNFNDLMSS
 AVPMTPEDPSFWDCFCFTEEIPIRNGTKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6425_b12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_015423

ORF Size: 927 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_015423.3](#)

RefSeq Size: 2880 bp

RefSeq ORF: 930 bp

Locus ID: 60496

UniProt ID: [Q9NRN7](#)

Cytogenetics: 11q22.3

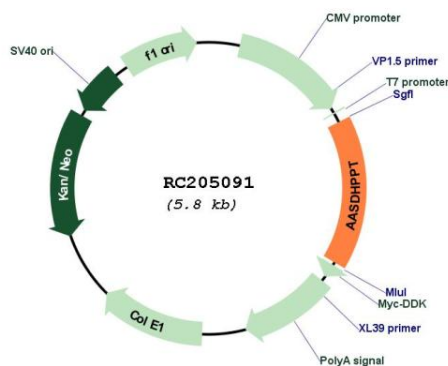
Domains: ACPS

Protein Pathways: Lysine biosynthesis, Lysine degradation, Metabolic pathways

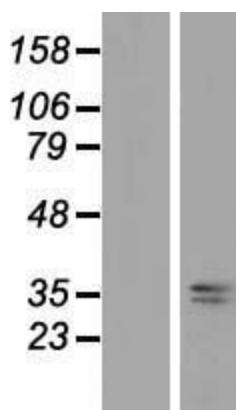
MW: 35.8 kDa

Gene Summary: The protein encoded by this gene is similar to *Saccharomyces cerevisiae* LYS5, which is required for the activation of the alpha-aminoadipate dehydrogenase in the biosynthetic pathway of lysine. Yeast alpha-aminoadipate dehydrogenase converts alpha-biosynthetic-aminoadipate semialdehyde to alpha-aminoadipate. It has been suggested that defects in the human gene result in pipecolic acidemia. [provided by RefSeq, Jul 2008]

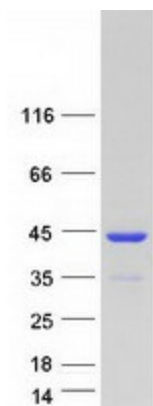
Product images:



Circular map for RC205091



Western blot validation of overexpression lysate (Cat# [LY414583]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205091 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AASDHPPT protein (Cat# [TP305091]). The protein was produced from HEK293T cells transfected with AASDHPPT cDNA clone (Cat# RC205091) using MegaTran 2.0 (Cat# [TT210002]).