

Product datasheet for **SC110025**

COASY (NM_025233) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COASY (NM_025233) Human Untagged Clone
Tag:	Tag Free
Symbol:	COASY
Synonyms:	DPCK; NBIA6; NBP; PCH12; pOV-2; PPAT; UKR1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_025233, the custom clone sequence may differ by one or more nucleotides

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ATGGCCGTATTCCGGTCGGGTCTCCTGGTGTGACGACGCCGCTGGCCTCCCTAGCCCCTCGCCTGGCCT
CCATCCTGACCTCGGCCGCCCGGCTGGTGAATCACACACTATGTTACCTGCAGCCGGGCATGAGCCT
GGAGGCCCGGCTCAGCCCCAGTCCAGCCCCGTGACGCCACGTTTGGAGTTCTTGATTTTCATCAGCAC
CTCTATGCTGGCGCCGAGTCCACAGGCACTTGGACGTGAGAATCCTACTGACCAATATCCGAACCAAGA
GCACCTTTCTCCCTCCCTGCCACCTCAGTCCAGAATCTGCCACCCGCCAGAAGTCGTGTTGACAGA
TTTCCAGACCCTGGATGGAAGCCAGTACAACCCGGTCAAACAGCAGCTAGTGCATTACGCCACCAGCTGT
TACAGCTGTTGTCCGCGACTGGCCTCGGTGCTGCTATACTCCGATTATGGGATAGGAGAAGTGCCCGTGG
AGCCCCGGATGTCCCCTTACCCTCCACGATCAGGCCAGCTTCCCCCGTGGCCGGGTCTCCAAAGCAGCC
GGTGCCTGGTACTACCGTGGCCTGTCGGTGGCAGTTTACCCTGCACACGCCACAAGGTGTTG
CTCAGTGTGCGTGCATCCTGGCCAGGAGCAGCTTGTGGTGGGAGTAGCAGACAAGATCTGTTGAAGA
GCAAGTTGCTCCCTGAGCTGCTCAACCTTATACAGAAGTGTGGAACATCTGAGTGAATCCTGGTGGGA
CATCAAGCCCTCCTTGACTTTTGTATGTCATCCCCCTGCTGGACCCCTATGGGCCCGCTGGCTCTGACCCC
TCCTGGAGTTTCTGGTGGTCAGCGAGGAGACCTATCGTGGGGGGATGGCCATCAACCGCTTCCGCCTTG
AGAATGACCTGGAGGAACCTGCTTTGTACCAGATCCAGCTGCTGAAGGACCTCAGACATACAGAGAATGA
AGAGGACAAAGTCAGCTCCTCCAGCTTCCGCCAGCGAATGTTGGGGAACCTGCTTCGGCCTCCATATGAA
AGGCCAGAGCTCCCACATGTCTCTATGTAATTGGGCTGACTGGCATCAGTGGCTCTGGGAAGAGCTCAA
TAGCTCAGCGACTGAAGGGCCTGGGGCGTGTGTCATTGACAGTGACCACCTGGGTATCGGGCCTATGC
CCCAGTGGCCCTGCCTACCAGCTGTGGTGGAGGCCCTTGGAAACAGATATTCTCCATAAAGATGGCATT
ATCAACAGGAAGTCTAGCCAGCCGGGTGTTTGGGAATAAGAAGCAGCTGAAGATACTCAGGCACATTA
TGTGGCAATTATCGCAAAGCTGGCCCGAGAGGAGATGGATCGGGCTGTGGCTGAGGGAAAGCGTGTGTG
TGTGATTGATGCCGCTGTGTTGCTTGAAGCCGGCTGGCAGAACCTGGTCCATGAGGTGTGGACTGCTGTC
ATCCCAGAGACTGAGGCTGTAAGACGATTGTGGAGAGGGATGGCCTCAGTGAAGCCGCGGCTCAAAGCC
GGCTGCAGAGCCAGATGAGCGGGCAGCAGCTTGTGGAACAGAGCCACGTGGTGTGCTCAGCACCTTGTGGGA
GCCGCATATACCCAACGCCAGGTGGAGAAAGCCTGGGCCCTCTGCAGAAGCGCATTCCCAAGACTCAT
CAGGCCCTCGACTGA
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_025233 unedited

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GTATTTTGTAAATACGACTCACTATAGGGCGGCCGCAATTCGGCACGAGGGTTGCAGCCA
GGGAAGCCTCCGCGGTGGTGAAGTGAACCCAAGCCTTGAGGTTTCAGCCTGGGCAGCA
TGGCCGTATTCCGGTCCGGTCTCCTGGTGTGACGACGCCGCTGGCCTCCCTAGCCCCCTC
GCCTGGCCTCCATCCTGACCTCGGCGGCCCGGCTGGTGAATCACACACTATGTTTACC
TGCAGCCGGGCATGAGCCTGGAGGGCCCGGCTCAGCCCCAGTACAGCCCCGTGCAGGCCA
CGTTTGGGTTCTTGATTTTCATCAGCACCTCTATGCTGGCGCCGACGTCCACAGGCACT
TGGACGTGAGAATCCTACTGACCAATATCCGAACCAAGAGCACCTTTCTCCCTCCCTGC
CCACCTCAGTCCAGAATCTCGCCACCCGCCAGAAGTCGTGTTGACAGATTTCCAGACCC
TGGATGGAAGCCAGTACAACCCGGTCAAACAGCAGCTAGTGCATTACGCCACCAGCTGTT
ACAGCTGTTGTCCGCGACTGGCCTCGGTGCTGCTATACTCCGATTATGGGATAGGAGAAG
TGCCCGTGGAGCCCTGGATGTCCCCTTACCCTCCACGATCAGGCCAGCTTCCCCCGTGG
CCGGGTCTCCAAAGCAGCCGGTGGCTGGTACTACCGTGGCGCTGTCGGTGGCACGTTTG
ACCGCCTGCACAACGCCACAAGGTGTGCTCAGTGTGCGTGCATCCTGGCCAGAACAG
CTTGTGTTGGGAGTAGCGACAAAGATCTGTTGAGAGCAAGTGCTCCCTGACTGCTCCACC
TTATCAGAACGTGTGGACATCTGATG
    
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Restriction Sites:

NotI-NotI

ACCN:

NM_025233

Insert Size:

2140 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_025233.4 , NP_079509.4
RefSeq Size:	2470 bp
RefSeq ORF:	1695 bp
Locus ID:	80347
UniProt ID:	Q13057
Cytogenetics:	17q21.2
Domains:	CoaE, CTP_transf_2
Protein Pathways:	Metabolic pathways, Pantothenate and CoA biosynthesis
Gene Summary:	<p>Coenzyme A (CoA) functions as a carrier of acetyl and acyl groups in cells and thus plays an important role in numerous synthetic and degradative metabolic pathways in all organisms. In eukaryotes, CoA and its derivatives are also involved in membrane trafficking and signal transduction. This gene encodes the bifunctional protein coenzyme A synthase (CoAsy) which carries out the last two steps in the biosynthesis of CoA from pantothenic acid (vitamin B5). The phosphopantetheine adenylyltransferase domain of this bifunctional protein catalyzes the conversion of 4'-phosphopantetheine into dephospho-coenzyme A (dpCoA) while its dephospho-CoA kinase domain completes the final step by phosphorylating dpCoA to form CoA. Mutations in this gene are associated with neurodegeneration with brain iron accumulation (NBIA). Alternative splicing results in multiple isoforms. [provided by RefSeq, Apr 2014]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes isoform a (also known as CoASy alpha). Both variants 1 and 2 encode the same isoform.</p>