

Product datasheet for **SC321977**

COASY (NM_001042530) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COASY (NM_001042530) Human Untagged Clone
Tag:	Tag Free
Symbol:	COASY
Synonyms:	DPCK; FLJ35179; NBP; pOV-2; PPAT; UKR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for SC321977
 CCGACGCGTGGGCGCGTGGTGCAGTGAACCCAAGCCTTGAGGTTTCAGTGAGTAGGG
 GGCCGACGTGAGCTTTAGCGTCCCCCTTAGCCTCCCTCTCGATTCTTGAAGACCCCTG
 GTGCAGCTTAGCAAGAGGGCCAGGATTTTGGATCCCCAGCCCTGTGACAAGGGTTCT
 GTCCAGTTTCCCCTCCCAGGATTTGACTCAGTTCAGCGAAGTCACCGCCCGTCTGAG
 AAATGAGGACACCAAGGCTTAGAGCACAGCCCCGAGGCGCGTCTACCAGGCCCGTCCC
 CTCCCCGGCTCCTGTGCGTACGACTGAAACCCCGTCCCTGTCCAGGCCCTCTCTCT
 GGGGTCCAAGGTCCCATACAGGCCCTCGCTCGGCCGAGGCCCTTCAGTCACCGTCGCC
 TCGTCTCCCTGACTGTCCGACGGCTGGGACGATGGCCGATTCCGGTGGGTCTCCTG
 GTGCTGACGACGCGCTGGCCTCCCTAGCCCTCGCTGGCTCCATCCTGACCTCGGG
 GCCCGGTGGTGAATCACACTCTATGTTACCTGCAGCCGGGCATGAGCCTGGAGGGC
 CCGGCTCAGCCCCAGTACAGCCCCGTGCAGGCCACGTTTGAGGTTCTTGATTTATCAGC
 CACCTCTATGCTGGCGCCGACGTCCACAGGCACCTGGACGTCAGAATCCTACTGACCAAT
 ATCCGAACCAAGAGCACCTTTCCCTCCCTGCCACCTCAGTCCAGAATCTCGCCAC
 CCGCCAGAAGTCGTGTTGACAGATTTCCAGACCCTGGATGGAAGCCAGTACAACCCGGTC
 AAACAGCAGCTAGTGCCTACGCCACCAGCTGTTACAGCTGTTGTCCGCGACTGGCTCG
 GTGCTGTATACTCCGATTATGGGATAGGAGAAGTGCCCGTGGAGCCCTGGATGTCCCC
 TTACCCTCCAGATCAGGCCAGCTTCCCCGTGGCCGGGTCTCCAAAGCAGCCGGTGCCT
 GGCTACTACCGTGGCGCTGTGCGTGGCACGTTTGACCGCTGCACAACGCCACAAAGGTG
 TTGCTCAGTGTGCGTGCATCCTGGCCAGGAGCAGCTTGTGGTGGGAGTAGCAGACAAA
 GATCTGTTGAAGAGCAAGTTGCTCCCTGAGCTGCTCAACCTTATACAGAACGTGTGGAA
 CATCTGAGTGAATCCTGGTGGACATCAAGCCCTCCTTGACTTTTGATGTCATCCCCCTG
 CTGGACCCCTATGGGCCCGCTGGCTGTGACCCCTCCCTGGAGTTTCTGGTGGTCAGCGAG
 GAGACCTATCGTGGGGGATGGCCATCAACCGCTTCCGCTTGAAGTACCTGGAGGAA
 CTTGCTTTGTACCAGATCCAGCTGCTGAAGGACCTCAGACATACGAGAATGAAGAGGAC
 AAGTCAGCTCCTCCAGCTTCCGCCAGGAATGTTGGGAACTGCTTCGGCCTCCATAT
 GAAAGGCCAGAGCTCCCCACATGTCTATGTAATTGGGCTGACTGGCATCAGTGGCTCT
 GGGAAGAGCTCAATAGCTCAGCGACTGAAGGGCCTGGGGCGTTTGTATTGACAGTGAC
 CACCTGGTTCATCGGCCATGCCCCAGGTGGCCCTGCCTACCAGCTGTGGTGGAGGCC
 TTTGGAACAGATATTCTCCATAAAGATGGCATCATCAACAGGAAGTCTAGGCAGCCGG
 GTGTTTGGGAATAAGAAGCAGCTGAAGATACTCACGGACATTATGTGGCCAATTATCGCA
 AAGCTGGCCCCGAGAGGAGATGGATCGGGCTGTGGCTGAGGGAAACGCTGTGTGTGATT
 GATGCCGCTGTGTGCTTGAAGCCGGCTGGCAGAACCTGGTCCATGAGGTGTGGACTGCT
 GTCATCCCAGAGACTGAGGCTGTAAGACGCATTGTGGAGAGGGATGGCCTCAGTGAAGCC
 GCGGCTCAAAGCCGGCTGCAGAGCCAGATGAGCGGGCAGCAGCTTGTGGAACAGAGCCAC
 GTGGTGTCTCAGCACCTTGTGGGAGCCGCATATCACCAACGCCAGGTGGAGAAAGCTGG
 GCCCTCTGCAGAAGCGCATTCCAAGACTCATCAGGCCCTCGACTGAAAAGTTCTCAGT
 TGATGTCACCCTGGTTCAGGCCAGAGTCCAAGCTATACTGTGCAGGACATGGCCAGG
 CCTGGTGGACACAGGAAGCCTACCCAACACGCTGGTATTTGGCCAACACTGAGGATGTGG
 TTCATGGGGGAGCAGTCCCCTCCCCTCTTGCCCATGGGTGACTCTTACCCACAGCTGA
 CTAGGGCCAGCGCAATACTGGAACCTGTAACAGAATTAAGGTGAATGTTCTGAAAAAA
 AAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_001042530

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).

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:	<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_001042530.1 , NP_001035995.1
RefSeq Size:	2417 bp
RefSeq ORF:	1695 bp
Locus ID:	80347
Cytogenetics:	17q21.2
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 (3) differs in the 5' UTR compared to variant 1. Variants 1, 2 and 3 encode the same isoform (a, also known as CoAsy alpha).</p>