

Recombinant Human COASY Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. COASY-1293H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	COASY MS Standard C13 and N15-labeled recombinant protein (NP_001035994) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.
Species	Human
Source	HEK293
Description	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.
Molecular Mass	62.4 kDa
AA Sequence	MAVFRSGLLVLTTPLASLAPRLASILTSAARLVNHTLYVHLQPGMSLEGPAQPQYSP VQATFEVLDFITHLYAGADVHRHLDVRILLTNIRTKSTFLPPLPTSVQNLAHPPEVVL

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DFQTLDGSQYNPVKQQLVRYATSCYSCCPRLASVLLYSDYGIGEVPEPLDVPLPST
 IRPASPVAGSPKQPVRGYYRGAVGGTFDRHLHNAHKVLLSVACILAEQLVVGVDK
 DLLKSKLLPELLQPYTERVEHLSEFLVDIKPSLTFDVIPLLDPYGPAGSDPSLEFLVVS
 EETRYGGMAINRFRLENDLEELALYQIQLLKDLRHTENEEDKVSSSSFRQRLGNLL
 RPPYERPELPTCLYVIGLTGISGSGKSSIAQRLKGLGAFVIDSDHLGHRAYAPGGPAY
 QPVVEAFGTDILHKDGIINRKVLGSRVFGNKKQLKILTDIMWPIIAKLAREEMDRAVAE
 GKRVCVIDAAVLEAGWQNLVHEVWTAVIPETEAVRRIVERDGLSEAAAQSRLQSQ
 MSGQQLVEQSHVVLSTLWEPHITQRQVEKAWALLQKRIPKTHQALDTRTRPLEQKLI
 SEEDLAANDILDYKDDDDKV

Purity > 80% as determined by SDS-PAGE and Coomassie blue staining

Stability Stable for 3 months from receipt of products under proper storage and handling conditions.

Storage Store at -80 centigrade. Avoid repeated freeze-thaw cycles.

Concentration 50 µg/mL as determined by BCA

Storage Buffer 100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

Gene Name COASY CoA synthase [Homo sapiens (human)]

Official Symbol COASY

Synonyms COASY; CoA synthase; Coenzyme A synthase; bifunctional coenzyme A synthase; CoASY; DPCK; NBP; PPAT; nucleotide binding protein; phosphopantetheine adenylyltransferase / dephosphocoenzyme A kinase; bifunctional phosphopantetheine adenylyl transferase/dephospho CoA kinase; UKR1; pOV-2;

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FLJ35179;

Gene ID 80347

mRNA Refseq NM_001042529

Protein Refseq NP_001035994

MIM 609855

UniProt ID Q13057

SDS-PAGE



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