COASY Polyclonal Antibody

Catalog No	BYab-04985
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;ELISA
Gene Name	COASY PSEC0106
Protein Name	Bifunctional coenzyme A synthase (CoA synthase) (NBP) (POV-2) [Includes: Phosphopantetheine adenylyltransferase (EC 2.7.7.3) (Dephospho-CoA pyrophosphorylase) (Pantetheine-phosphate adenylyltransferas
Immunogen	Synthesized peptide derived from human protein . at AA range: 260-340
Specificity	COASY Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	62kD
Cell Pathway	Cytoplasm . Mitochondrion matrix . The protein is mainly present in the mitochondrial matrix, probably anchored to the inner mitochondrial membrane, but is also present in cell lysate. .
Tissue Specificity	Expressed in all tissues examined including brain, heart, skeletal muscle, colon, thymus, spleen, kidney, liver, small intestine, placenta, lung and peripheral blood leukocyte. Lowest expression in peripheral blood leukocytes and highest in kidney and liver. Isoform 2 is expressed mainly in the brain.
Function	catalytic activity:ATP + 3'-dephospho-CoA = ADP + CoA.,catalytic activity:ATP + pantetheine 4'-phosphate = diphosphate + 3'-dephospho-CoA.,function:Bifunctional enzyme that catalyzes the fourth and fifth sequential steps of CoA biosynthetic pathway. The fourth reaction is catalyzed by the phosphopantetheine adenylyltransferase, coded by the coaD domain; the fifth reaction is catalyzed by the dephospho-CoA kinase, coded by the coaE domain. May act as a point of CoA biosynthesis

	regulation.,pathway:Cofactor biosynthesis; coenzyme A biosynthesis; coenzyme A from pantothenate: step 4/5.,pathway:Cofactor biosynthesis; coenzyme A biosynthesis; coenzyme A from pantothenate: step 5/5.,similarity:Contains 1 DPCK (dephospho-CoA kinase) domain.,similarity:In the central section; belongs to the eukaryotic coaD family.,subunit:Monomer.,tissue specificity:Expressed in all tissues examined including br
Background	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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images