

COASY Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51683

Product Information

Application	WB
Primary Accession	Q13057
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	62329

Additional Information

Gene ID	80347
Other Names	Bifunctional coenzyme A synthase, CoA synthase, NBP, POV-2, Phosphopantetheine adenylyltransferase, Dephospho-CoA pyrophosphorylase, Pantetheine-phosphate adenylyltransferase, PPAT, Dephospho-CoA kinase, DPCK, Dephosphocoenzyme A kinase, DPCOAK, COASY
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C. Stable for 12 months from date of receipt

Protein Information

Name	COASY (HGNC:29932)
Function	Bifunctional enzyme that catalyzes the fourth step of the coenzyme A biosynthetic pathway, the adenylation of 4'- phosphopantetheine, and the fifth step, the phosphorylation of dephospho-CoA to CoA.
Cellular Location	Cytoplasm, cytosol. Mitochondrion matrix. Note=The protein is mainly cytosolic and active in the cytosol (PubMed:40925986). Present in the mitochondrial matrix, probably anchored to the inner mitochondrial membrane (PubMed:24360804).
Tissue Location	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

Background

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.

References

Daugherty M.,et al.J. Biol. Chem. 277:21431-21439(2002).
Aghajanian S.,et al.Biochem. J. 365:13-18(2002).
Ota T.,et al.Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Zody M.C.,et al.Nature 440:1045-1049(2006).

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