

**COASY Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP51683****Specification**

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**COASY Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">Q13057</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	62 KDa

**COASY Antibody - 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

**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

**COASY Antibody - Protein Information****Name** COASY ([HGNC:29932](#))**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.

**Cellular Location**

Cytoplasm. Mitochondrion matrix. Note=The protein is mainly present in the mitochondrial matrix, probably anchored to the inner mitochondrial membrane, but is also present in cell lysate

**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

## **COASY Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **COASY Antibody - Images**

## **COASY Antibody - Background**

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## **COASY Antibody - 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).