

COASY Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP10371c**Specification**

COASY Antibody (Center) Blocking peptide - Product Information

Primary Accession [O13057](#)
Other Accession [NP_001035995.1](#), [NP_001035997.2](#),
[NP_079509.5](#), [NP_001035994.1](#),
[NP_001035996.1](#)

COASY Antibody (Center) Blocking peptide - 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

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

COASY Antibody (Center) Blocking peptide - 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 (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

COASY Antibody (Center) Blocking peptide - Images

COASY Antibody (Center) Blocking peptide - Background

Biosynthesis of coenzyme A (CoA) from pantothenic acid (vitamin B5) is an essential universal pathway in prokaryotes and eukaryotes. COASY is a bifunctional enzyme that catalyzes the 2 last steps in CoA synthesis. These activities are performed by 2 separate enzymes, phosphopantetheine adenylyltransferase (PPAT; EC 2.7.7.3) and dephospho-CoA kinase (DPCK; EC 2.7.1.24), in prokaryotes (Daugherty et al., 2002 [PubMed 11923312]). [supplied by OMIM].

COASY Antibody (Center) Blocking peptide - References

Guey, L.T., et al. Eur. Urol. 57(2):283-292(2010) Breus, O., et al. Biochem. Biophys. Res. Commun. 385(4):581-585(2009) Hamaguchi, M., et al. Jpn. J. Clin. Oncol. 38(11):734-742(2008) Nemazany, I., et al. Biochem. Biophys. Res. Commun. 341(4):995-1000(2006) Oh, J.H., et al. Mamm. Genome 16(12):942-954(2005)