10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

COASY Antibody (monoclonal) (M05)

Mouse monoclonal antibody raised against a partial recombinant COASY.
Catalog # AT1577a

Specification

COASY Antibody (monoclonal) (M05) - Product Information

Application	**WB, IHC, E**
Primary Accession	Q13057
Other Accession	NM_025233
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG1 Kappa**
Calculated MW	**62329**

COASY Antibody (monoclonal) (M05) - 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

Target/Specificity
COASY (NP_079509, 461 a.a. ~ 564 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution
WB~~1:500~1000

Format
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions
COASY Antibody (monoclonal) (M05) is for research use only and not for use in diagnostic or therapeutic procedures.

COASY Antibody (monoclonal) (M05) - Protocols

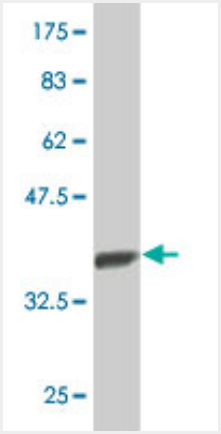
Provided below are standard protocols that you may find useful for product applications.

- Western Blot

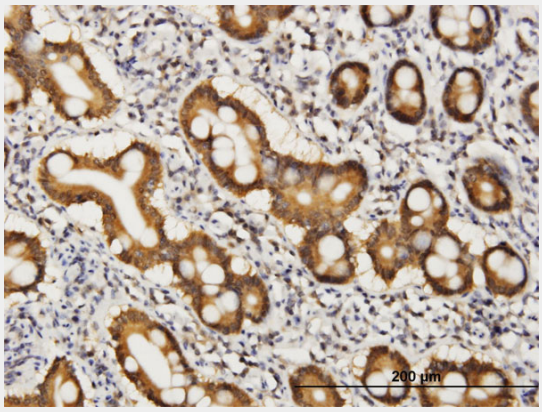
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- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

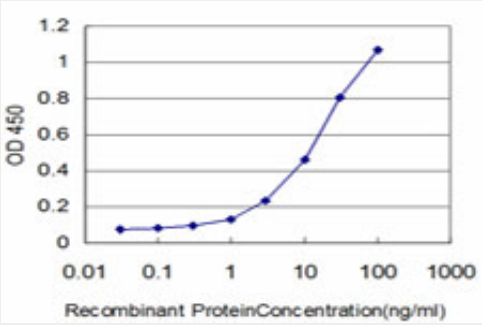
COASY Antibody (monoclonal) (M05) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.18 KDa) .



Immunoperoxidase of monoclonal antibody to COASY on formalin-fixed paraffin-embedded human small Intestine. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged COASY is approximately 1ng/ml as a capture antibody.

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COASY Antibody (monoclonal) (M05) - 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]).

COASY Antibody (monoclonal) (M05) - References

Genetic susceptibility to distinct bladder cancer subphenotypes. Guey LT, et al. Eur Urol, 2010 Feb. PMID 19692168.CoA synthase is in complex with p85alphaPI3K and affects PI3K signaling pathway. Breus O, et al. Biochem Biophys Res Commun, 2009 Aug 7. PMID 19482007.Possible difference in frequencies of genetic polymorphisms of estrogen receptor alpha, estrogen metabolism and P53 genes between estrogen receptor-positive and -negative breast cancers. Hamaguchi M, et al. Jpn J Clin Oncol, 2008 Nov. PMID 18820009.Identification of a novel CoA synthase isoform, which is primarily expressed in the brain. Nemazanyy I, et al. Biochem Biophys Res Commun, 2006 Mar 24. PMID 16460672.Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560.