SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

SANTA CRUZ BIOTECHNOLOGY, INC.

COASY (h2): 293T Lysate: sc-117292

BACKGROUND

COASY (coenzyme A synthase), also known as NBP (nucleotide binding protein), DPCK (dephospho-coenzyme A kinase), PPAT (pantetheine-phosphate adenylyltransferase), UKR1 or pOV-2, is a bifunctional enzyme involved in the biosynthesis of coenzyme A (CoA). COASY exhibits both Ppat activity and DPCK activity, catalyzing steps four and five, respectively, of the CoA biosynthetic pathway. Functioning as a widely expressed monomer and induced by phospholipids, COASY localizes to the outer mitochondrial membrane and facilitates the conversion of 4'-phosphopantetheine to dephospho-CoA and the subsequent generation of CoA. CoA is an important molecule in the cell, participating in carbohydrate, amino acid and fatty acid metabolism. It is the predominant acetyl and acyl group carrier and is used as a substrate by approximately 4% of all cellular enzymes. Due to alternative splicing events, an additional isoform of COASY, namely COASY β, is expressed in brain and contains an extra 29 amino acids at the N-terminus.

REFERENCES

1. Aghajanian, S. and Worrall, D.M. 2002. Identification and characterization of the gene encoding the human phosphopantetheine adenylyltransferase and dephospho-CoA kinase bifunctional enzyme (CoA synthase). Biochem. J. 365: 13-18.
2. Daugherty, M., et al. 2002. Complete reconstitution of the human coenzyme A biosynthetic pathway via comparative genomics. J. Biol. Chem. 277: 21431-21439.
3. Zhyvoloup, A., et al. 2002. Molecular cloning of CoA synthase. The missing link in CoA biosynthesis. J. Biol. Chem. 277: 22107-22110.
4. Zhyvoloup, A., et al. 2003. Subcellular localization and regulation of coenzyme A synthase. J. Biol. Chem. 278: 50316-50321.
5. Nemazanyy, I., et al. 2004. Specific interaction between S6K1 and CoA synthase: a potential link between the mTOR/S6K pathway, CoA biosynthesis and energy metabolism. FEBS Lett. 578: 357-362.
6. Kardia, S.R., et al. 2006. Characterizing variation in sex steroid hormone pathway genes in women of 4 races/ethnicities: the study of women's health across the nation (SWAN). Am. J. Med. 119: S3-S15.
7. Nemazanyy, I., et al. 2006. Identification of a novel CoA synthase isoform, which is primarily expressed in the brain. Biochem. Biophys. Res. Commun. 341: 995-1000.

CHROMOSOMAL LOCATION

Genetic locus: COASY (human) mapping to 17q21.2.

PRODUCT

COASY (h2): 293T Lysate represents a lysate of human COASY transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

COASY (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive COASY antibodies. Recommended use: 10-20 µl per lane.

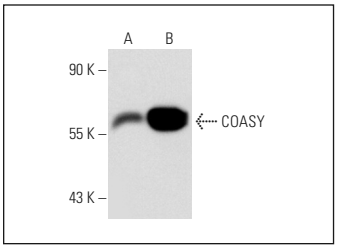
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

COASY (SS06): sc-100474 is recommended as a positive control antibody for Western Blot analysis of enhanced human COASY expression in COASY transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



COASY (SS06): sc-100474. Western blot analysis of COASY expression in non-transfected: sc-117752 (**A**) and human COASY transfected: sc-117292 (**B**) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.