



**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



Sar1a (m): 293T Lysate: sc-123353

BACKGROUND

There are a number of components involved in the secretory pathway of cells. Vesicular traffic within the early secretory pathway is mediated by COPI- and COPII-coated vesicles. The COPII vesicle coat protein promotes the formation of endoplasmic reticulum (ER) derived transport vesicles that carry secretory proteins to the Golgi complex. The Sar1 gene encodes two isoforms, Sar1a and Sar1b, in mammalian cells. These proteins are low molecular weight GTPases, which are essential for the formation of transport vesicles from the ER. Mutations in the Sar1 gene result in Anderson's disease (and/or chylomicron retention disease CMRD), a rare, autosomal recessive lipid malabsorption disorder characterized by chronic diarrhea, failure to thrive and hypcholesterolemia in childhood.

REFERENCES

- Kuge, O., Dascher, C., Orci, L., Rowe, T., Amherdt, M., Plutner, H., Ravazzola, M., Tanigawa, G., Rothman, J.E. and Balch, W.E. 1994. Sar1 promotes vesicle budding from the endoplasmic reticulum but not Golgi compartments. *J. Cell Biol.* 125: 51-65.
- Vahlensieck, Y., Riezman, H. and Meyhack, B. 1995. Transcriptional studies on yeast Sec genes provide no evidence for regulation at the transcriptional level. *Yeast* 11: 901-911.
- Salama, N.R., Chuang, J.S. and Schekman, R.W. 1997. Sec31 encodes an essential component of the COPII coat required for transport vesicle budding from the endoplasmic reticulum. *Mol. Biol. Cell* 8: 205-217.
- Nickel, W., Brugger, B. and Wieland, F.T. 1998. Protein and lipid sorting between the endoplasmic reticulum and the Golgi complex. *Semin. Cell Dev. Biol.* 9: 493-501.
- Saito, Y., Yamanishi, T., Oka, T. and Nakano, A. 1999. Identification of Sec12, Sed4, truncated Sec16, and EKS1/HRD3 as multicopy suppressors of TS mutants of Sar1 GTPase. *J. Biochem.* 125: 130-137.
- Shoulders, C.C., Stephens, D.J. and Jones, B. 2004. The intracellular transport of chylomicrons requires the small GTPase, Sar1b. *Curr. Opin. Lipidol.* 15: 191-197.
- Silvain, M., Bligny, D., Aparicio, T., Laforêt, P., Grodet, A., Peretti, N., Ménard, D., Djouadi, F., Jardel, C., Bégué, J., Walker, F., Schmitz, J., Lachaux, A., Aggerbeck, L. and Samson-Bouma, M. 2008. Anderson's disease (chylomicron retention disease): a new mutation in the SARA2 gene associated with muscular and cardiac abnormalities. *Clin. Genet.* 74: 546-552.

CHROMOSOMAL LOCATION

Genetic locus: Sar1a (mouse) mapping to 10 B4.

PRODUCT

Sar1a (m): 293T Lysate represents a lysate of mouse Sar1a transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

Sar1a (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Sar1a 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.

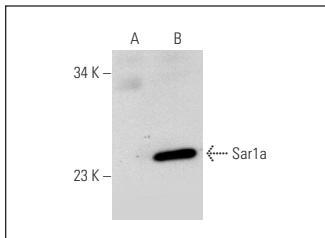
Sar1a (K-44): sc-130463 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Sar1a expression in Sar1a transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG_X BP-HRP: sc-516102 or m-IgG_X 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



Sar1a (K-44): sc-130463. Western blot analysis of Sar1a expression in non-transfected: sc-117752 (**A**) and mouse Sar1a transfected: sc-123353 (**B**) 293T whole cell lysates.

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.

PROTOCOLS

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