SEC23 (h): 293 Lysate: sc-110590



The Power to Question

BACKGROUND

COPII-coated vesicles form on the endoplasmic reticulum by the stepwise recruitment of three cytosolic components: Sar1-GTP to initiate coat formation, SEC23/24 heterodimer to select SNARE and cargo molecules, and SEC13/31 to induce coat polymerization and membrane deformation. SEC23A is the functional human counterpart of the yeast COPII component, SEC23p, which suggests that it plays a similar role in mammalian protein export from the ER. Mouse SEC23 is most abundant in brain and fibroblasts.

REFERENCES

- Ruohola, H., Kabcenell, A.K. and Ferro-Novick, S. 1988. Reconstitution of protein transport from the endoplasmic reticulum to the Golgi complex in yeast: the acceptor Golgi compartment is defective in the SEC23 mutant. J. Cell Biol. 107: 1465-1476.
- Wadhwa, R., Kaul, S.C., Komatsu, Y., Ikawa, Y., Sarai, A. and Sugimoto, Y. 1993. Identification and differential expression of yeast SEC23-related gene (Msec23) in mouse tissues. FEBS Lett. 315: 193-196.
- Paccaud, J.P., Reith, W., Carpentier, J.L., Ravazzola, M., Amherdt, M., Schekman, R. and Orci, L. 1996. Cloning and functional characterization of mammalian homologues of the COPII component SEC23. Mol. Biol. Cell 7: 1535-1546.
- Weidler, M., Reinhard, C., Friedrich, G., Wieland, F.T. and Rosch, P. 2000. Structure of the cytoplasmic domain of p23 in solution: implications for the formation of COPI vesicles. Biochem. Biophys. Res. Commun. 271: 401-408.
- Botelho, R.J., Hackam, D.J., Schreiber, A.D. and Grinstein, S. 2000. Role of COPI in phagosome maturation. J. Biol. Chem. 275: 15717-15727.
- Bi, X., Corpina, R.A. and Goldberg, J. 2002. Structure of the SEC23/24-Sar1 pre-budding complex of the COPII vesicle coat. Nature 419: 271-277.
- Cohen, M., Stutz, F., Belgareh, N., Haguenauer-Tsapis, R. and Dargemont, C. 2003. Ubp3 requires a cofactor, Bre5, to specifically de-ubiquitinate the COPII protein, SEC23. Nat. Cell Biol. 5: 661-667.

CHROMOSOMAL LOCATION

Genetic locus: SEC23A (human) mapping to 14q21.1, SEC23B (human) mapping to 20p11.23.

PRODUCT

SEC23 (h): 293 Lysate represents a lysate of human SEC23 transfected 293 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.

PROTOCOLS

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

APPLICATIONS

SEC23 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive SEC23 antibodies Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

RESEARCH USE

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com