

SCYL2 (m): 293T Lysate: sc-123395

BACKGROUND

SCYL2 (SCY1-like 2), also known as CVAK104 (Coated vesicle-associated kinase of 104 kDa), is a 929 amino acid protein that contains one HEAT repeat and one protein kinase domain. Localized to a variety of locations within the cell, including the perinuclear region of the cytoplasm, the *trans*-golgi network membrane and clathrin-coated vesicles, SCYL2 exists as a component of AP-2-containing Clathrin coated structures. SCYL2 is thought to function as a Ser/Thr protein kinase, exhibiting kinase activity towards adaptor complex proteins, possibly regulating Clathrin-dependent trafficking events between the Golgi network and endosomes. Additionally, SCYL2 may play a role in the sorting of SNARE proteins and, ultimately, in embryonic development.

REFERENCES

1. Hanks, S.K., Quinn, A.M. and Hunter, T. 1988. The protein kinase family: conserved features and deduced phylogeny of the catalytic domains. *Science* 241: 42-52.
2. Nagase, T., Kikuno, R., Ishikawa, K.I., Hirose, M. and Ohara, O. 2000. Prediction of the coding sequences of unidentified human genes. XVI. The complete sequences of 150 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 7: 65-73.
3. Conner, S.D. and Schmid, S.L. 2005. CVAK104 is a novel poly-L-lysine-stimulated kinase that targets the β 2-subunit of AP-2. *J. Biol. Chem.* 280: 21539-21544.
4. Düwel, M. and Ungewickell, E.J. 2006. Clathrin-dependent association of CVAK104 with endosomes and the *trans*-Golgi network. *Mol. Biol. Cell* 17: 4513-4525.
5. Schmid, E.M., Ford, M.G., Burtey, A., Praefcke, G.J., Peak-Chew, S.Y., Mills, I.G., Benmerah, A. and McMahon, H.T. 2006. Role of the AP-2 β -appendage hub in recruiting partners for Clathrin-coated vesicle assembly. *PLoS Biol.* 4: e262.
6. Borner, G.H., Rana, A.A., Forster, R., Harbour, M., Smith, J.C. and Robinson, M.S. 2007. CVAK104 is a novel regulator of Clathrin-mediated SNARE sorting. *Traffic* 8: 893-903.

CHROMOSOMAL LOCATION

Genetic locus: Scyl2 (mouse) mapping to 10 C2.

PRODUCT

SCYL2 (m): 293T Lysate represents a lysate of mouse SCYL2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l 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

SCYL2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SCYL2 antibodies. Recommended use: 10-20 μ l per lane.

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

RESEARCH USE

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