SANTA CRUZ BIOTECHNOLOGY, INC.

SCYL2 (C-24): sc-130260



The Power to Question

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 calthrin-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

- 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.
- Nagase, T., Kikuno, R., Ishikawa, K.I., Hirosawa, 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.
- 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.
- 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 (human) mapping to 12q23.1; Scyl2 (mouse) mapping to 10 C2.

SOURCE

SCYL2 (C-24) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of SCYL2 of human origin.

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SCYL2 (C-24) is recommended for detection of SCYL2 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SCYL2 siRNA (h): sc-95795, SCYL2 siRNA (m): sc-153279, SCYL2 shRNA Plasmid (h): sc-95795-SH, SCYL2 shRNA Plasmid (m): sc-153279-SH, SCYL2 shRNA (h) Lentiviral Particles: sc-95795-V and SCYL2 shRNA (m) Lentiviral Particles: sc-153279-V.

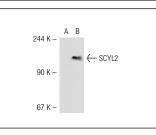
Molecular Weight of SCYL2: 104 kDa.

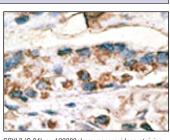
Positive Controls: SCYL2 (m): 293T Lysate: sc-123395, T-47D cell lysate: sc-2293 or mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA





SCYL2 (C-24): sc-130260. Western blot analysis of SCYL2 expression in non-transfected: sc-117752 (A) and mouse SCYL2 transfected: sc-123395 (B) 293T whole cell lysates.

SCYL2 (C-24): sc-130260. Immunoperoxidase staining of formalin fixed, paraffin-embedded human brain tissue showing cytoplasmic staining.

RESEARCH USE

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

PROTOCOLS

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