SANTA CRUZ BIOTECHNOLOGY, INC.

SCYL3 (G-8): sc-398328

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

SCYL3 (SCY1-like 3), also known as protein-associating with the carboxyl-terminal domain of ezrin, is a 742 amino acid protein that belongs to the protein kinase superfamily. The SCYL3 protein contains an N-terminal myristoylation consensus sequence, followed by a protein kinase domain, two tandemly arrayed HEAT motifs composed of pairs of antiparallel α helices, and a C-terminal ezrin-binding domain. The SCYL3 protein may be phosphorylated. Ubiquitously expressed, the SCYL3 protein colocalizes with ezrin, Actin and HCAM in lamellipodia. The SCYL3 protein may be myristoylated, which may target SCYL3 to Golgi compartment. Existing as 2 alternatively spliced isoforms, the SCYL3 gene contains 14 exons, is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish, fruit fly and mosquito, and maps to human chromosome 1q24.2.

REFERENCES

1. Sullivan, A., et al. 2003. PACE-1, a novel protein that interacts with the C-terminal domain of ezrin. Exp. Cell Res. 284: 224-238.
2. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 608192. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Maurer-Stroh, S., et al. 2004. MYRbase: analysis of genome-wide glycine myristoylation enlarges the functional spectrum of eukaryotic myristoylated proteins. Genome Biol. 5: R21.
4. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.
5. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. Nature 441: 315-321.

CHROMOSOMAL LOCATION

Genetic locus: SCYL3 (human) mapping to 1q24.2; Scyl3 (mouse) mapping to 1 H2.2.

SOURCE

SCYL3 (G-8) is a mouse monoclonal antibody raised against amino acids 141-265 mapping within an internal region of SCYL3 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SCYL3 (G-8) is available conjugated to agarose (sc-398328 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398328 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398328 PE), fluorescein (sc-398328 FITC), Alexa Fluor® 488 (sc-398328 AF488), Alexa Fluor® 546 (sc-398328 AF546), Alexa Fluor® 594 (sc-398328 AF594) or Alexa Fluor® 647 (sc-398328 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398328 AF680) or Alexa Fluor® 790 (sc-398328 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

SCYL3 (G-8) is recommended for detection of SCYL3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (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 SCYL3 siRNA (h): sc-88316, SCYL3 siRNA (m): sc-153280, SCYL3 shRNA Plasmid (h): sc-88316-SH, SCYL3 shRNA Plasmid (m): sc-153280-SH, SCYL3 shRNA (h) Lentiviral Particles: sc-88316-V and SCYL3 shRNA (m) Lentiviral Particles: sc-153280-V.

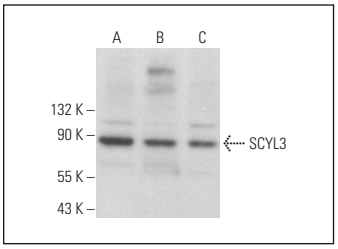
Molecular Weight of SCYL3 isoforms 1/2: 83/77 kDa.

Positive Controls: SCYL3 (m): 293T Lysate: sc-123396, HT-29 whole cell lysate: sc-364232 or HeLa whole cell lysate: sc-2200.

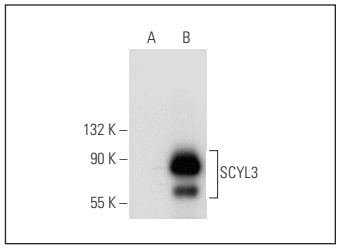
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SCYL3 (G-8): sc-398328. Western blot analysis of SCYL3 expression in HT-29 (**A**), Hep G2 (**B**) and HeLa (**C**) whole cell lysates.



SCYL3 (G-8): sc-398328. Western blot analysis of SCYL3 expression in non-transfected: sc-117752 (**A**) and mouse SCYL3 transfected: sc-123396 (**B**) 293T whole cell lysates.

STORAGE

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

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.