SANTA CRUZ BIOTECHNOLOGY, INC.

SCRN2 (P-14): sc-139288

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The Power to Question

BACKGROUND

The SCRN (Secernin) gene family has three vertebrate paralogs, i.e. SCRN1, SCRN2 and SCRN3, which are closely linked to human HOXA, HOXB and HOXD cluster, respectively. SCRN2 (secernin-2) is a 425 amino acid protein that belongs to the peptidase C69 family and the Secernin subfamily. Vertebrate SCRN genes showed a topology of the form (A)(BC), i.e. (Hsa2 Hsa7)(Hsa17), with SCRN2 falling outside the SCRN3-SCRN1 cluster. The SCRN2 gene is conserved in canine, bovine, mouse, rat and zebrafish, and maps to human chromosome 17q21.32. Chromosome 17 makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Chromosome 17 is linked to neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

REFERENCES

1. Way, G., et al. 2002. Purification and identification of secernin, a novel cytosolic protein that regulates exocytosis in mast cells. Mol. Biol. Cell 13: 3344-3354.
2. Welsch, M.J., et al. 2005. Birt-Hogg-Dubé syndrome. Int. J. Dermatol. 44: 668-673.
3. Suela, J., et al. 2007. Neurofibromatosis 1, and Not TP53, seems to be the main target of chromosome 17 deletions in *de novo* acute myeloid leukemia. J. Clin. Oncol. 25: 1151-1152.
4. Al-Dirbashi, O.Y., et al. 2007. Quantification of N-acetylaspartic acid in urine by LC-MS/MS for the diagnosis of Canavan disease. J. Inherit. Metab. Dis. 30: 612.
5. Murakami, N., et al. 2008. Novel deletion mutation in GFAP gene in an infantile form of Alexander disease. Pediatr. Neurol. 38: 50-52.
6. Abbasi, A.A. 2010. Unraveling ancient segmental duplication events in human genome by phylogenetic analysis of multigene families residing on HOX-cluster paralogons. Mol. Phylogenet. Evol. 57: 836-848.

CHROMOSOMAL LOCATION

Genetic locus: SCRN2 (human) mapping to 17q21.32; Scrn2 (mouse) mapping to 11 D.

SOURCE

SCRN2 (P-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of SCRN2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-139288 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

SCRN2 (P-14) is recommended for detection of SCRN2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with SCRN1 or SCRN3.

SCRN2 (P-14) is also recommended for detection of SCRN2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for SCRN2 siRNA (h): sc-93708, SCRN2 siRNA (m): sc-153273, SCRN2 shRNA Plasmid (h): sc-93708-SH, SCRN2 shRNA Plasmid (m): sc-153273-SH, SCRN2 shRNA (h) Lentiviral Particles: sc-93708-V and SCRN2 shRNA (m) Lentiviral Particles: sc-153273-V.

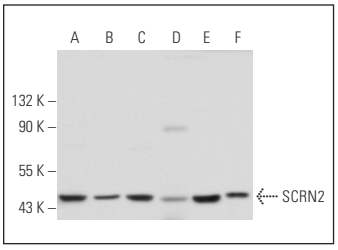
Molecular Weight of SCRN2: 47 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HEK293 whole cell lysate: sc-45136 or IMR-32 cell lysate: sc-2409.

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.

DATA



SCRN2 (P-14): sc-139288. Western blot analysis of SCRN2 expression in BxPC-3 (**A**), Jurkat (**B**), HEK293 (**C**), PANC-1 (**D**) and IMR-32 (**E**) whole cell lysates and mouse liver tissue extract (**F**).

STORAGE

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

PROTOCOLS

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