SANTA CRUZ BIOTECHNOLOGY, INC.

Swiprosin-1 (H-40): sc-292051



BACKGROUND

Swiprosin-1 (SWS1), also known as EFHD2 (EF-hand domain-containing protein D2), is a 240 amino acid protein that regulates spontaneous apoptosis through the regulation of $Bcl-x_S$ abundance. Localized to membrane raft, Swiprosin-1 is expressed in lymphocytes and contains two EF-hand domains. The gene encoding Swiprosin-1 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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- Lau, E.K., et al. 1999. Two novel polymorphic sequences in the glucocerebrosidase gene region enhance mutational screening and founder effect studies of patients with Gaucher disease. Hum. Genet. 104: 293-300.
- Vuadens, F., et al. 2002. Identification of specific proteins in different lymphocyte populations by proteomic tools. Proteomics 2: 105-111.
- Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. Eur. J. Hum. Genet. 12: 365-371.
- 5. Vuadens, F., et al. 2004. Identification of swiprosin 1 in human lymphocytes. Proteomics 4: 2216-2220.
- Oliveira, S.A., et al. 2005. Identification of risk and age-at-onset genes on chromosome 1p in Parkinson disease. Am. J. Hum. Genet. 77: 252-264.
- Holliday, E.G., et al. 2009. Strong evidence for a novel schizophrenia risk locus on chromosome 1p31.1 in homogeneous pedigrees from Tamil Nadu, India. Am. J. Psychiatry 166: 206-215.

CHROMOSOMAL LOCATION

Genetic locus: EFHD2 (human) mapping to 1p36.21; Efhd2 (mouse) mapping to 4 E1.

SOURCE

Swiprosin-1 (H-40) is a rabbit polyclonal antibody raised against amino acids 41-80 mapping near the N-terminus of Swiprosin-1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Swiprosin-1 (H-40) is recommended for detection of Swiprosin-1 of mouse, rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Swiprosin-1 (H-40) is also recommended for detection of Swiprosin-1 in additional species, including bovine.

Suitable for use as control antibody for Swiprosin-1 siRNA (h): sc-78656, Swiprosin-1 siRNA (m): sc-153964, Swiprosin-1 shRNA Plasmid (h): sc-78656-SH, Swiprosin-1 shRNA Plasmid (m): sc-153964-SH, Swiprosin-1 shRNA (h) Lentiviral Particles: sc-78656-V and Swiprosin-1 shRNA (m) Lentiviral Particles: sc-153964-V.

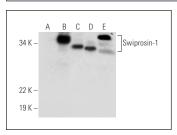
Molecular Weight of Swiprosin-1: 27 kDa.

Positive Controls: Swiprosin-1 (h): 293T Lysate: sc-111884, A-431 whole cell lysate: sc-2201 or Raji whole cell lysate: sc-364236.

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



Swiprosin-1 (H-40): sc-292051. Western blot analysis of Swiprosin-1 expression in non-transfected 293T: sc-117752 (**A**), human Swiprosin-1 transfected 293T: sc-111884 (**B**), A-431 (**C**) and Raji (**D**) whole cell lysates and mouse brain tissue extract (**E**).

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.