SANTA CRUZ BIOTECHNOLOGY, INC.

Josephin-1 (K-13): sc-86154

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Josephin-1, also known as JOSD1 (josephin domain containing 1), is a 202 amino acid protein that contains one josephin domain and is encoded by a gene that maps to human chromosome 22. Chromosome 22 houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, neurofibromatosis type 2, autism and schizophrenia. Additionally, translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia chromosome and the subsequent production of the novel fusion protein Bcr-Abl, a potent cell proliferation activator found in several types of leukemias.

REFERENCES

1. Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. Chromosome 22. Genet. Test. 2: 89-97.
2. Schwab, S.G. and Wildenauer, D.B. 1999. Chromosome 22 workshop report. Am. J. Med. Genet. 88: 276-278.
3. Matsuda, A., et al. 2003. Large-scale identification and characterization of human genes that activate NFκB and MAPK signaling pathways. Oncogene 22: 3307-3318.
4. Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. J. Hum. Genet. 51: 1037-1045.
5. Paylor, R., et al. 2006. Tbx1 haploinsufficiency is linked to behavioral disorders in mice and humans: implications for 22q11 deletion syndrome. Proc. Natl. Acad. Sci. USA 103: 7729-7734.
6. Zheng, X., et al. 2006. Bcr and its mutants, the reciprocal t(9;22)-associated Abl/Bcr fusion proteins, differentially regulate the cytoskeleton and cell motility. BMC Cancer 6: 262.
7. Ahronowitz, I., et al. 2007. Mutational spectrum of the NF2 gene: a meta-analysis of 12 years of research and diagnostic laboratory findings. Hum. Mutat. 28: 1-12.

CHROMOSOMAL LOCATION

Genetic locus: JOSD1 (human) mapping to 22q13.1; Josd1 (mouse) mapping to 15 E1.

SOURCE

Josephin-1 (K-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Josephin-1 of human origin.

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.

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-86154 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Josephin-1 (K-13) is recommended for detection of Josephin-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

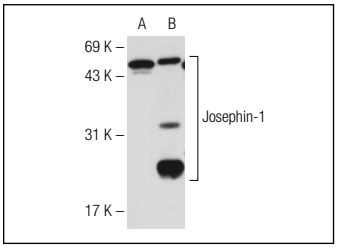
Josephin-1 (K-13) is also recommended for detection of Josephin-1 in additional species, including equine and avian.

Suitable for use as control antibody for Josephin-1 siRNA (h): sc-75361, Josephin-1 siRNA (m): sc-146328, Josephin-1 shRNA Plasmid (h): sc-75361-SH, Josephin-1 shRNA Plasmid (m): sc-146328-SH, Josephin-1 shRNA (h) Lentiviral Particles: sc-75361-V and Josephin-1 shRNA (m) Lentiviral Particles: sc-146328-V.

Molecular Weight of Josephin-1: 23 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Josephin-1 (m): 293 Lysate: sc-110755.

DATA



Josephin-1 (K-13): sc-86154. Western blot analysis of Josephin-1 expression in non-transfected 293: sc-110760 (**A**), mouse Josephin-1 transfected 293: sc-110755 (**B**) and HeLa (**C**) whole cell lysates.

RESEARCH USE

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