

Josephin-1 (N-17): sc-86155

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

- Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 22. Genet. Test.* 2: 89-97.
- Schwab, S.G. and Wildenauer, D.B. 1999. Chromosome 22 workshop report. *Am. J. Med. Genet.* 88: 276-278.
- Matsuda, A., et al. 2003. Large-scale identification and characterization of human genes that activate NF κ B and MAPK signaling pathways. *Oncogene* 22: 3307-3318.
- Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. *J. Hum. Genet.* 51: 1037-1045.
- 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.
- 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.
- 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.
- Hay, B.N. 2007. Deletion 22q11: spectrum of associated disorders. *Semin. Pediatr. Neurol.* 14: 136-139.
- Tzvetkov, N. and Breuer, P. 2007. Josephin domain-containing proteins from a variety of species are active de-ubiquitination enzymes. *Biol. Chem.* 388: 973-978.

CHROMOSOMAL LOCATION

Genetic locus: JOSD1 (human) mapping to 22q13.1; Jsd1 (mouse) mapping to 15 E1.

SOURCE

Josephin-1 (N-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus 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.

PRODUCT

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

Blocking peptide available for competition studies, sc-86155 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Josephin-1 (N-17) 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 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).

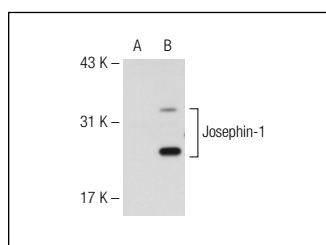
Josephin-1 (N-17) is also recommended for detection of Josephin-1 in additional species, including equine, canine, bovine and porcine.

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.

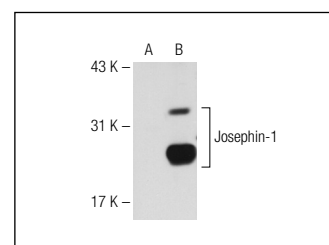
Molecular Weight of Josephin-1: 23 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Josephin-1 (m2): 293T Lysate: sc-110404 or Josephin-1 (m): 293 Lysate: sc-110755.

DATA



Josephin-1 (N-17): sc-86155. Western blot analysis of Josephin-1 expression in non-transfected 293T: sc-117752 (A), mouse Josephin-1 transfected 293T: sc-110404 (B) and HeLa (C) whole cell lysates.



Josephin-1 (N-17): sc-86155. Western blot analysis of Josephin-1 expression in non-transfected 293T: sc-110760 (A), mouse Josephin-1 transfected 293T: sc-110755 (B) and HeLa (C) whole cell lysates.

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.