

# SDF-2L1 (T-13): sc-86217

## BACKGROUND

SDF-2L1 (stromal cell-derived factor 2-like 1), also known as PWP1-interacting protein 8, is a 221 amino acid protein that localizes to the lumen of the endoplasmic reticulum (ER) and contains 3 MIR domains. Expressed ubiquitously with highest expression in testis and moderate expression in colon, spleen, pancreas, prostate and small intestine, SDF-2L1 is thought to play a role in the unfolded protein response within the ER and may be involved in the pathogenesis of hepatocellular carcinoma. The gene encoding SDF-2L1 maps to human chromosome 22, which 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.

## REFERENCES

- Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 22. Genet. Test.* 2: 89-97.
- Dunham, I., Shimizu, N., Roe, B.A., Chissoe, S., Hunt, A.R., Collins, J.E., Bruskiwich, R., Beare, D.M., Clamp, M., Smink, L.J., Ainscough, R., Almeida, J.P., Babbage, A., Bagguley, C., Bailey, J., Barlow, K., Bates, K.N., Beasley, O., Bird, C.P., et al. 1999. The DNA sequence of human chromosome 22. *Nature* 402: 489-495.
- Fukuda, S., Sumii, M., Masuda, Y., Takahashi, M., Koike, N., Teishima, J., Yasumoto, H., Itamoto, T., Asahara, T., Dohi, K. and Kamiya, K. 2001. Murine and human SDF2L1 is an endoplasmic reticulum stress-inducible gene and encodes a new member of the Pmt/rt protein family. *Biochem. Biophys. Res. Commun.* 280: 407-414.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607551. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Bies, C., Blum, R., Dudek, J., Nastainczyk, W., Oberhauser, S., Jung, M. and Zimmermann, R. 2004. Characterization of pancreatic ERj3p, a homolog of yeast DnaJ-like protein Scj1p. *Biol. Chem.* 385: 389-395.
- Tsilchorozidou, T., Menko, F.H., Lalloo, F., Kidd, A., De Silva, R., Thomas, H., Smith, P., Malcolmson, A., Dore, J., Madan, K., Brown, A., Yovos, J.G., Tsaligopoulos, M., Vogiatzis, N., Baser, M.E., Wallace, A.J. and Evans, D.G. 2004. Constitutional rearrangements of chromosome 22 as a cause of neurofibromatosis 2. *J. Med. Genet.* 41: 529-534.
- Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. *J. Hum. Genet.* 51: 1037-1045.

## CHROMOSOMAL LOCATION

Genetic locus: SDF2L1 (human) mapping to 22q11.21; Sdf2l1 (mouse) mapping to 16 A3.

## SOURCE

SDF-2L1 (T-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SDF-2L1 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-86217 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SDF-2L1 (T-13) is recommended for detection of SDF-2L1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

SDF-2L1 (T-13) is also recommended for detection of SDF-2L1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SDF-2L1 siRNA (h): sc-76462, SDF-2L1 siRNA (m): sc-153287, SDF-2L1 shRNA Plasmid (h): sc-76462-SH, SDF-2L1 shRNA Plasmid (m): sc-153287-SH, SDF-2L1 shRNA (h) Lentiviral Particles: sc-76462-V and SDF-2L1 shRNA (m) Lentiviral Particles: sc-153287-V.

Molecular Weight of SDF-2L1: 24 kDa.

## 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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.