

TEX2 (X-21): sc-134076

BACKGROUND

TEX2 (Testis-expressed sequence 2 protein) is a 1,127 amino acid multi-pass membrane protein that is specifically expressed in testis. There are two isoforms of TEX2 that are produced as a result of alternative splicing events. The gene encoding TEX2 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Chromosome 17 has also been implicated in the pathogenesis of frontotemporal dementia and parkinsonism.

REFERENCES

- James, C.D., Carlbon, E., Nordenskjold, M., Collins, V.P. and Cavenee, W.K. 1989. Mitotic recombination of chromosome 17 in astrocytomas. *Proc. Natl. Acad. Sci. USA* 86: 2858-2862.
- Lindblom, A., Skoog, L., Andersen, T.I., Rotstein, S., Nordenskjöld, M. and Larsson, C. 1993. Four separate regions on chromosome 17 show loss of heterozygosity in familial breast carcinomas. *Hum. Genet.* 91: 6-12.
- Negrini, M., Sabbioni, S., Haldar, S., Possati, L., Castagnoli, A., Corallini, A., Barbanti-Brodano, G. and Croce, C.M. 1994. Tumor and growth suppression of breast cancer cells by chromosome 17-associated functions. *Cancer Res.* 54: 1818-1824.
- Clausen, O.P., Lothe, R.A., Børresen-Dale, A.L., De Angelis, P., Chen, Y., Rognum, T.O. and Meling, G.I. 1998. Association of p53 accumulation with TP53 mutations, loss of heterozygosity at 17p13, and DNA ploidy status in 273 colorectal carcinomas. *Diagn. Mol. Pathol.* 7: 215-223.
- Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 17. Genet. Test.* 2: 357-381.
- Risio, M., Casorzo, L., Chiecchio, L., De Rosa, G. and Rossini, F.P. 2003. Deletions of 17p are associated with transition from early to advanced colorectal cancer. *Cancer Genet. Cytogenet.* 147: 44-49.
- Wszolek, Z.K., Tsuboi, Y., Ghetti, B., Pickering-Brown, S., Baba, Y. and Cheshire, W.P. 2006. Frontotemporal dementia and parkinsonism linked to chromosome 17 (FTDP-17). *Orphanet J Rare Dis* 1: 30.
- Mayya, V., Lundgren, D.H., Hwang, S.I., Rezaul, K., Wu, L., Eng, J.K., Rodionov, V. and Han, D.K. 2009. Quantitative phosphoproteomic analysis of T cell receptor signaling reveals system-wide modulation of protein-protein interactions. *Sci Signal* 2: ra46.

CHROMOSOMAL LOCATION

Genetic locus: TEX2 (human) mapping to 17q23.3; Tex2 (mouse) mapping to 11 E1.

SOURCE

TEX2 (X-21) is an affinity purified rabbit polyclonal antibody raised against synthetic TEX2 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

TEX2 (X-21) is recommended for detection of TEX2 of mouse 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

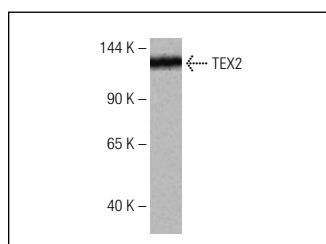
Suitable for use as control antibody for TEX2 siRNA (h): sc-93815, TEX2 siRNA (m): sc-154219, TEX2 shRNA Plasmid (h): sc-93815-SH, TEX2 shRNA Plasmid (m): sc-154219-SH, TEX2 shRNA (h) Lentiviral Particles: sc-93815-V and TEX2 shRNA (m) Lentiviral Particles: sc-154219-V.

Molecular Weight of TEX2: 125 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



TEX2 (X-21): sc-134076. Western blot analysis of TEX2 expression in Jurkat whole cell lysate.

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 or our catalog for detailed protocols and support products.