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TXNDC9 (m2): 293T Lysate: sc-124386

BACKGROUND

Thioredoxins comprise a family of small proteins that, by catalyzing the oxidation of disulfide bonds, participate in redox reactions throughout the cell. Proteins that contain thioredoxin domains do not necessarily convey the oxidative properties of thioredoxins, but generally function as disulfide isomerases that enzymatically rearrange disulfide bonds found in various proteins. TXNDC9 (thioredoxin domain-containing protein 9), also known as APACD (ATP-binding protein associated with cell differentiation), is a 226 amino acid protein that contains one thioredoxin domain and may be involved in cell differentiation events. The gene encoding TXNDC9 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes. Additionally, an extremely rare recessive genetic disorder, Alström syndrome, is caused by mutations in the ALMS1 gene, which also maps to chromosome 2.

REFERENCES

- Holmgren, A. 1985. Thioredoxin. *Annu. Rev. Biochem.* 54: 237-271.
- Holmgren, A. 1989. Thioredoxin and glutaredoxin systems. *J. Biol. Chem.* 264: 13963-13966.
- Eklund, H., Gleason, F.K. and Holmgren, A. 1991. Structural and functional relations among thioredoxins of different species. *Proteins* 11: 13-28.
- Freedman, R.B., Hirst, T.R. and Tuite, M.F. 1994. Protein disulphide isomerase: building bridges in protein folding. *Trends Biochem. Sci.* 19: 331-336.
- Ogawa, S., Matsubayashi, Y. and Nishida, E. 2004. An evolutionarily conserved gene required for proper microtubule architecture in *Caenorhabditis elegans*. *Genes Cells* 9: 83-93.
- Thomas, A.C., Cullup, T., Norgett, E.E., Hill, T., Barton, S., Dale, B.A., Sprecher, E., Sheridan, E., Taylor, A.E., Wilroy, R.S., DeLozier, C., Burrows, N., Goodyear, H., Fleckman, P., Stephens, K.G., Mehta, L., Watson, R.M., Graham, R., Wolf, R., Slavotinek, A., Martin, M., Bourn, D., Mein, C.A., O'Toole, E.A. and Kelsell, D.P. 2006. ABCA12 is the major harlequin ichthyosis gene. *J. Invest. Dermatol.* 126: 2408-2413.
- Marshall, J.D., Beck, S., Maffei, P. and Naggert, J.K. 2007. Alström syndrome. *Eur. J. Hum. Genet.* 15: 1193-1202.
- Marshall, J.D., Hinman, E.G., Collin, G.B., Beck, S., Cerqueira, R., Maffei, P., Milan, G., Zhang, W., Wilson, D.I., Hearn, T., Tavares, P., Vettor, R., Veronese, C., Martin, M., So, W.V., Nishina, P.M. and Naggert, J.K. 2007. Spectrum of ALMS1 variants and evaluation of genotype-phenotype correlations in Alström syndrome. *Hum. Mutat.* 28: 1114-1123.

CHROMOSOMAL LOCATION

Genetic locus: Txndc9 (mouse) mapping to 1 B.

PRODUCT

TXNDC9 (m2): 293T Lysate represents a lysate of mouse TXNDC9 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

TXNDC9 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive TXNDC9 antibodies. Recommended use: 10-20 µl per lane.

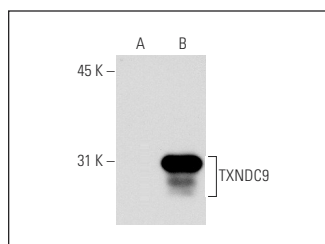
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TXNDC9 (39-R): sc-100599 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse TXNDC9 expression in TXNDC9 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



TXNDC9 (39-R): sc-100599. Western blot analysis of TXNDC9 expression in non-transfected: sc-117752 (A) and mouse TXNDC9 transfected: sc-124386 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.