

# TGIF2LX1 (Y-23): sc-134083

## BACKGROUND

The homeobox DNA-binding domain is a 60 amino acid motif that is conserved among many species and functions to bind DNA via a helix-turn-helix structure, thereby playing a role in transcriptional regulation and the control of gene expression. TGIF2LX (TGFB-induced factor homeobox 2-like, X-linked), also known as TGIFLX, is a 241 amino acid protein that localizes to the nucleus and contains one homeobox DNA-binding domain. Expressed specifically in adult testicular tissue, TGIF2LX is thought to function as a transcriptional regulator that may play a role in spermatogenesis. Like TGIF2LX, TGIF2LY is a nuclear protein that is testis-specific and functions as a transcriptional regulator during spermatid maturation.

## REFERENCES

- Blanco-Arias, P., Sargent, C.A. and Affara, N.A. 2002. The human-specific Yp11.2/Xq21.3 homology block encodes a potentially functional testis-specific TGIF-like retroposon. *Mamm. Genome*. 13: 463-468.
- Skaletsky, H., Kuroda-Kawaguchi, T., Minx, P.J., Cordum, H.S., Hillier, L., Brown, L.G., Repping, S., Pyntikova, T., Ali, J., Bieri, T., Chinwalla, A., Delehaunty, A., Delehaunty, K., Du, H., Fewell, G., Fulton, L., Fulton, R., Graves, T., Hou, S.F., Latrielle, P., Leonard, S., Mardis, E., et al. 2003. The male-specific region of the human Y chromosome is a mosaic of discrete sequence classes. *Nature*. 423: 825-837.
- Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 300411. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Satoh, S. and Watanabe, S. 2008. TGIF, a homeodomain transcription factor, regulates retinal progenitor cell differentiation. *Exp. Eye Res.* 87: 571-579.
- Aarabi, M., Ousati-Ashtiani, Z., Nazarian, A., Modarressi, M.H. and Heidari, M. 2008. Association of TGIFLX/Y mRNA expression with azoospermia in infertile men. *Mol. Reprod. Dev.* 75: 1761-1766.
- Ousati Ashtiani, Z., Ayati, M., Modarressi, M.H., Raoofian, R., Sabah Goulian, B., Greene, W.K. and Heidari, M. 2009. Association of TGIFLX/Y mRNA expression with prostate cancer. *Med. Oncol.* 26: 73-77.

## CHROMOSOMAL LOCATION

Genetic locus: Tgif2lx (mouse) mapping to X E1.

## SOURCE

TGIF2LX1 (Y-23) is an affinity purified rabbit polyclonal antibody raised against synthetic TGIF2LX peptide of mouse origin.

## PRODUCT

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

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

TGIF2LX1 (Y-23) is recommended for detection of TGIF2LX1 of mouse 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 TGIF2LX1 siRNA (m): sc-154241, TGIF2LX1 shRNA Plasmid (m): sc-154241-SH and TGIF2LX1 shRNA (m) Lenti-viral Particles: sc-154241-V.

Molecular Weight of TGIF2LX: 27 kDa.

Molecular Weight of TGIF2LY: 21 kDa.

Positive Controls: mouse testis extract: sc-2405.

## 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).

## 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.