

## ▶ TEX28 (V-13): sc-131350

### BACKGROUND

TEX28 (testis expressed 28), also known as fTEX, is a 410 amino acid single-pass membrane protein that is encoded by a gene that may be associated with the MYP1 X-linked myopia phenotypes. It is suggested that the TEX28 gene consists of five exons that span nearly the entire distance between the protein-coding regions of the color pigment genes and a transketolase-related gene. Any mutations in the TEX28 gene may be involved in color vision disorders. The TEX28 gene is located on human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination, as an X and a Y chromosome lead to normal male development, while two copies of an X chromosome lead to normal female development. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

### REFERENCES

1. Givens, J.R., et al. 1975. Features of Turner's syndrome in women with polycystic ovaries. *Obstet. Gynecol.* 45: 619-624.
2. Hanna, M.C., et al. 1997. Identification of a gene within the tandem array of red and green color pigment genes. *Genomics* 43: 384-386.
3. Bernardino-Sgherri, J., et al. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. *Cytogenet. Genome Res.* 99: 85-91.
4. Oda, S., et al. 2003. Analysis of L-cone/M-cone visual pigment gene arrays in females by long-range PCR. *Vision Res.* 43: 489-495.
5. Ueyama, H., et al. 2004. An insertion/deletion TEX28 polymorphism and its application to analysis of red/green visual pigment gene arrays. *J. Hum. Genet.* 49: 548-557.
6. Hayashi, T., et al. 2006. Novel form of a single X-linked visual pigment gene in a unique dichromatic color-vision defect. *Vis. Neurosci.* 23: 411-417.
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### CHROMOSOMAL LOCATION

Genetic locus: Tex28 (mouse) mapping to X A7.3.

### SOURCE

TEX28 (V-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TEX28 of mouse origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131350 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

TEX28 (V-13) is recommended for detection of TEX28 of mouse 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); non cross-reactive with other TEX family members.

Suitable for use as control antibody for TEX28 siRNA (m): sc-154226, TEX28 shRNA Plasmid (m): sc-154226-SH and TEX28 shRNA (m) Lentiviral Particles: sc-154226-V.

Molecular Weight of TEX28: 46 kDa.

Positive Controls: F9 cell lysate: sc-2245, mouse testis extract: sc-2405 or c4 whole cell lysate.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (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.