

# TEX28 (H-3): sc-514450

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: TEX28 (human) mapping to Xq28; Tex28 (mouse) mapping to X A7.3.

## SOURCE

TEX28 (H-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 227-238 within an internal region of TEX28 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TEX28 (H-3) is available conjugated to agarose (sc-514450 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514450 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514450 PE), fluorescein (sc-514450 FITC), Alexa Fluor® 488 (sc-514450 AF488), Alexa Fluor® 546 (sc-514450 AF546), Alexa Fluor® 594 (sc-514450 AF594) or Alexa Fluor® 647 (sc-514450 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514450 AF680) or Alexa Fluor® 790 (sc-514450 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514450 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

TEX28 (H-3) is recommended for detection of TEX28 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for TEX28 siRNA (h): sc-90955, TEX28 siRNA (m): sc-154226, TEX28 shRNA Plasmid (h): sc-90955-SH, TEX28 shRNA Plasmid (m): sc-154226-SH, TEX28 shRNA (h) Lentiviral Particles: sc-90955-V and TEX28 shRNA (m) Lentiviral Particles: sc-154226-V.

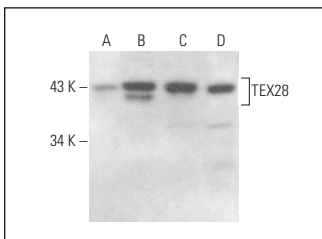
Molecular Weight of TEX28: 46 kDa.

Positive Controls: Hs68 cell lysate: sc-2230, HL-60 whole cell lysate: sc-2209 or EOC 20 whole cell lysate: sc-364187.

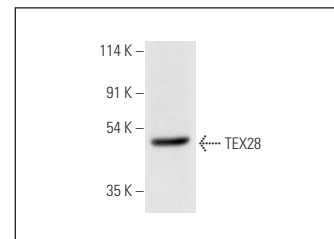
## RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



TEX28 (H-3): sc-514450. Western blot analysis of TEX28 expression in Hs68 (A), EOC 20 (B) and F9 (C) whole cell lysates and rat testis tissue extract (D).



TEX28 (H-3): sc-514450. Western blot analysis of TEX28 expression in HL-60 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](http://www.scbt.com) for detailed protocols and support products.

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