

# TEX37 (D-1): sc-515807

## BACKGROUND

TEX37 (testis-expressed sequence 37 protein), also known as TSC21, is a 180 amino acid nuclear protein that is expressed specifically in testis. The gene encoding TEX37 maps to human chromosome 2, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome, is due to mutations in the ALMS1 gene. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes.

## REFERENCES

1. Baldini, A., et al. 1993. An alphoid DNA sequence conserved in all human and great ape chromosomes: evidence for ancient centromeric sequences at human chromosomal regions 2q21 and 9q13. *Hum. Genet.* 90: 577-583.
2. Patel, S.B., et al. 1998. Mapping a gene involved in regulating dietary cholesterol absorption. The sitosterolemia locus is found at chromosome 2p21. *J. Clin. Invest.* 102: 1041-1044.
3. Zumsteg, U., et al. 2000. Alstrom syndrome: confirmation of linkage to chromosome 2p12-13 and phenotypic heterogeneity in three affected sibs. *J. Med. Genet.* 37: E8.
4. Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (white) gene subfamily maps to human chromosome 2p21 in the region of the sitosterolemia locus. *Cytogenet. Cell Genet.* 92: 204-208.
5. Hearn, T., et al. 2002. Mutation of ALMS1, a large gene with a tandem repeat encoding 47 amino acids, causes Alström syndrome. *Nat. Genet.* 31: 79-83.

## CHROMOSOMAL LOCATION

Genetic locus: Tex37 (mouse) mapping to 6 C1.

## SOURCE

TEX37 (D-1) is a mouse monoclonal antibody raised against amino acids 19-180 mapping at the C-terminus of TEX37 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.

TEX37 (D-1) is available conjugated to agarose (sc-515807 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515807 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515807 PE), fluorescein (sc-515807 FITC), Alexa Fluor® 488 (sc-515807 AF488), Alexa Fluor® 546 (sc-515807 AF546), Alexa Fluor® 594 (sc-515807 AF594) or Alexa Fluor® 647 (sc-515807 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515807 AF680) or Alexa Fluor® 790 (sc-515807 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

TEX37 (D-1) is recommended for detection of TEX37 of mouse 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 TEX37 siRNA (m): sc-154711, TEX37 shRNA Plasmid (m): sc-154711-SH and TEX37 shRNA (m) Lentiviral Particles: sc-154711-V.

Molecular Weight of TEX37: 21 kDa.

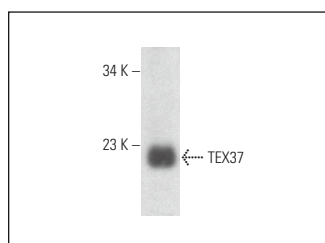
Positive Controls: mouse testis extract: sc-2405 or mouse epididymus tissue extract.

## RECOMMENDED SUPPORT REAGENTS

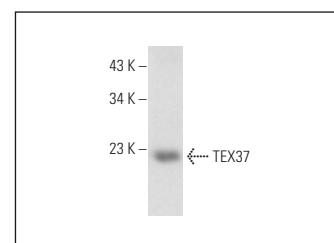
To ensure optimal results, the following support reagents are recommended:

- 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



TEX37 (D-1): sc-515807. Western blot analysis of TEX37 expression in mouse testis tissue extract.



TEX37 (D-1): sc-515807. Western blot analysis of TEX37 expression in mouse epididymus tissue extract.

## 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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