

OY-TES-1 (G-5): sc-390594

BACKGROUND

OY-TES-1, also known as ACRBP (acrosin binding protein) or SP32, is a 543 amino acid secreted protein that is found on sperm acrosomes where it colocalizes with acrosin. Expressed in normal testicular tissue, OY-TES-1 binds to acrosin and is thought to mediate the packaging and condensation of acrosin in the acrosomal matrix. In addition to its expression in testis, OY-TES-1 is present in cancer tissue throughout the body, including breast, bladder, liver and lung carcinomas, suggesting an involvement in tumor formation and metastasis. The gene encoding OY-TES-1 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and Trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

1. Baba, T., et al. 1994. An acrosomal protein, sp32, in mammalian sperm is a binding protein specific for two proacrosins and an acrosin intermediate. *J. Biol. Chem.* 269: 10133-10140.
2. Ono, T., et al. 2001. Identification of proacrosin binding protein sp32 precursor as a human cancer/testis antigen. *Proc. Natl. Acad. Sci. USA* 98: 3282-3287.
3. Tümer, Z., et al. 2002. Genomic structure, chromosome mapping and expression analysis of the human AVIL gene, and its exclusion as a candidate for locus for inflammatory bowel disease at 12q13-14 (IBD2). *Gene* 288: 179-185.

CHROMOSOMAL LOCATION

Genetic locus: ACRBP (human) mapping to 12p13.31; Acrbp (mouse) mapping to 6 F2.

SOURCE

OY-TES-1 (G-5) is a mouse monoclonal antibody raised against amino acids 31-188 mapping near the N-terminus of OY-TES-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

OY-TES-1 (G-5) is available conjugated to agarose (sc-390594 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390594 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390594 PE), fluorescein (sc-390594 FITC), Alexa Fluor® 488 (sc-390594 AF488), Alexa Fluor® 546 (sc-390594 AF546), Alexa Fluor® 594 (sc-390594 AF594) or Alexa Fluor® 647 (sc-390594 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390594 AF680) or Alexa Fluor® 790 (sc-390594 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

OY-TES-1 (G-5) is recommended for detection of OY-TES-1 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), immunohistochemistry (including paraffin-embedded sections) (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 OY-TES-1 siRNA (h): sc-95804, OY-TES-1 siRNA (m): sc-151953, OY-TES-1 shRNA Plasmid (h): sc-95804-SH, OY-TES-1 shRNA Plasmid (m): sc-151953-SH, OY-TES-1 shRNA (h) Lentiviral Particles: sc-95804-V and OY-TES-1 shRNA (m) Lentiviral Particles: sc-151953-V.

Molecular Weight of OY-TES-1: 61 kDa.

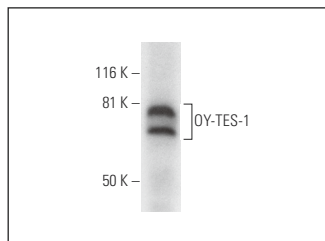
Positive Controls: human testis extract: sc-363781.

RECOMMENDED SUPPORT REAGENTS

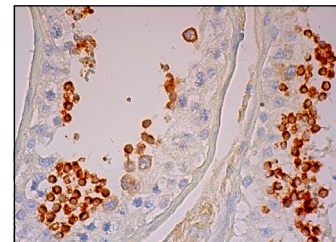
To ensure optimal results, the following support reagents are recommended:

- 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.
- 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



OY-TES-1 (G-5): sc-390594. Western blot analysis of OY-TES-1 expression in human testis tissue extract.



OY-TES-1 (G-5): sc-390594. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of a subset of cells in seminiferous ducts.

SELECT PRODUCT CITATIONS

1. Ge, Y.Y., et al. 2021. Combined treatment with epigenetic agents enhances anti-tumor activity of T cells by upregulating the ACRBP expression in hepatocellular carcinoma. *Am. J. Transl. Res.* 13: 7591-7609.

STORAGE

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