

TUSC1 (C-14): sc-165836



The Power to Question

BACKGROUND

TUSC1 (tumor suppressor candidate gene 1 protein), also known as TSG-9, is a 209 amino acid protein that is highly expressed in testis and weakly expressed in muscle, colon, lung and spleen. It is suggested that TUSC1 may play a role in lung tumorigenesis. The gene encoding TUSC1 is located within the region of chromosome 9p which contains tumor suppressor genes critical in carcinogenesis. Chromosome 9 consists of about 145 million bases and 4% of the human genome and encodes nearly 900 genes. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Chromosome 9 is partnered with chromosome 22 in the translocation leading to the aberrant production of Bcr-Abl fusion protein often found in leukemias.

REFERENCES

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- Shan, Z., et al. 2004. Identifying novel homozygous deletions by microsatellite analysis and characterization of tumor suppressor candidate 1 gene, TUSC1, on chromosome 9p in human lung cancer. *Oncogene* 23: 6612-6620.
- Zheng, X., et al. 2006. BCR and its mutants, the reciprocal t(9;22)-associated Abl/Bcr fusion proteins, differentially regulate the cytoskeleton and cell motility. *BMC Cancer* 7: 262.
- Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610529. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Burmeister, T., et al. 2007. Atypical Bcr-Abl mRNA transcripts in adult acute lymphoblastic leukemia. *Haematologica* 92: 1699-1702.
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CHROMOSOMAL LOCATION

Genetic locus: TUSC1 (human) mapping to 9p21.2.

SOURCE

TUSC1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TUSC1 of human 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-165836 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

TUSC1 (C-14) is recommended for detection of TUSC1 of human 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)], 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 TUSC1 siRNA (h): sc-92663, TUSC1 shRNA Plasmid (h): sc-92663-SH and TUSC1 shRNA (h) Lentiviral Particles: sc-92663-V.

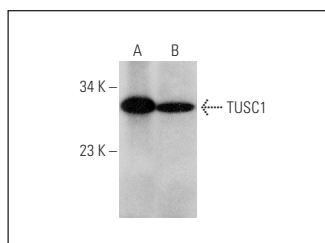
Molecular Weight of TUSC1: 23 kDa.

Positive Controls: human lung extract: sc-363767 or human spleen extract: sc-363779.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



TUSC1 (C-14): sc-165836. Western blot analysis of TUSC1 expression in human lung (A) and human spleen (B) tissue extracts.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.