

SPAG7 (C-14): sc-244199



The Power to Question

BACKGROUND

SPAG7 (sperm-associated antigen 7) is a 227 amino acid nuclear protein that contains one R3H domain and is expressed in fetal brain. The gene that encodes SPAG7 consists of approximately 8,612 bases and maps to human chromosome 17p13.2. Encoding more than 1,200 genes, chromosome 17 comprises over 2.5% of the human genome. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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- Varley, J.M., et al. 1997. A detailed study of loss of heterozygosity on chromosome 17 in tumours from Li-Fraumeni patients carrying a mutation to the TP53 gene. *Oncogene* 14: 865-871.
- Kersemaekers, A.M., et al. 1998. Loss of heterozygosity for defined regions on chromosomes 3, 11 and 17 in carcinomas of the uterine cervix. *Br. J. Cancer* 77: 192-200.
- Mao, M., et al. 1998. Identification of genes expressed in human CD34⁺ hematopoietic stem/progenitor cells by expressed sequence tags and efficient full-length cDNA cloning. *Proc. Natl. Acad. Sci. USA* 95: 8175-8180.

CHROMOSOMAL LOCATION

Genetic locus: SPAG7 (human) mapping to 17p13.2; Spag7 (mouse) mapping to 11 B3.

SOURCE

SPAG7 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SPAG7 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-244199 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

SPAG7 (C-14) is recommended for detection of SPAG7 of mouse, rat and 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); non cross-reactive with other SPAG family members.

Suitable for use as control antibody for SPAG7 siRNA (h): sc-93842, SPAG7 siRNA (m): sc-153707, SPAG7 shRNA Plasmid (h): sc-93842-SH, SPAG7 shRNA Plasmid (m): sc-153707-SH, SPAG7 shRNA (h) Lentiviral Particles: sc-93842-V and SPAG7 shRNA (m) Lentiviral Particles: sc-153707-V.

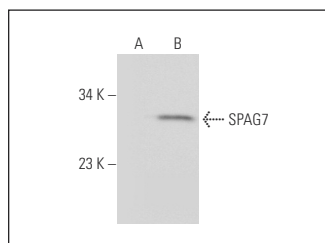
Molecular Weight of SPAG7: 26 kDa.

Positive Controls: SPAG7 (m): 293T Lysate: sc-126038.

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



SPAG7 (C-14): sc-244199. Western blot analysis of SPAG7 expression in non-transfected: sc-117752 (A) and mouse SPAG7 transfected: sc-126038 (B) 293T whole cell lysates.

PROTOCOLS

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