

TUSC2 (A-17): sc-100211



The Power to Question

BACKGROUND

TUSC2 (tumor suppressor candidate 2), also known as FUS1, LGCC or PDAP2, is a 110 amino acid protein that is expressed at high levels in kidney, pancreas, lung, heart and skeletal muscle where it is thought to function as a tumor suppressor. More specifically, TUSC2 inhibits invasive colony formation by inducing G₁ cell cycle arrest and ultimately causing apoptosis, thereby preventing tumor growth. The gene encoding TUSC2 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan Syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: TUSC2 (human) mapping to 3p21.31; Tusc2 (mouse) mapping to 9 F1.

SOURCE

TUSC2 (A-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TUSC2 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-100211 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TUSC2 (A-17) is recommended for detection of TUSC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 family members TUSC1, TUSC2 and TUSC5.

Suitable for use as control antibody for TUSC2 siRNA (h): sc-77910, TUSC2 siRNA (m): sc-154807, TUSC2 shRNA Plasmid (h): sc-77910-SH, TUSC2 shRNA Plasmid (m): sc-154807-SH, TUSC2 shRNA (h) Lentiviral Particles: sc-77910-V and TUSC2 shRNA (m) Lentiviral Particles: sc-154807-V.

Molecular Weight of TUSC2: 12 kDa.

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) 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.

RESEARCH USE

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

PROTOCOLS

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