

TUSC2 (1550CT388.74.12): sc-517369

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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CHROMOSOMAL LOCATION

Genetic locus: TUSC2 (human) mapping to 3p21.31.

SOURCE

TUSC2 (1550CT388.74.12) is a mouse monoclonal antibody raised against a recombinant protein corresponding to TUSC2 of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

TUSC2 (1550CT388.74.12) is recommended for detection of TUSC2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

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

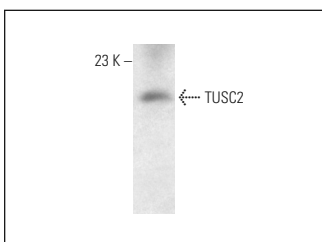
Molecular Weight of TUSC2: 12 kDa.

Positive Controls: human skeletal muscle extract: sc-363776.

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).

DATA



TUSC2 (1550CT388.74.12): sc-517369. Western blot analysis of TUSC2 expression in human skeletal muscle tissue extract.

SELECT PRODUCT CITATIONS

1. Chen, J., et al. 2019. MicroRNA-663b downregulation inhibits proliferation and induces apoptosis in bladder cancer cells by targeting TUSC2. *Mol. Med. Rep.* 19: 3896-3902.

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.