# SANTA CRUZ BIOTECHNOLOGY, INC.

# TUSC3 (D-9): sc-390566



### BACKGROUND

Made up of nearly 146 million bases, chromosome 8 encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and are typically associated with a poor prognosis. Portions of chromosome 8 have been linked to schizophrenia and bipolar disorder. Trisomy 8, also known as Warkany syndrome 2, most often results in early miscarriage but is occasionally seen in a mosaic form in surviving patients who suffer to a varying degree from a number of symptoms, including retarded mental and motor development, and certain facial and developmental defects. WRN is a DNA helicase encoded by chromosome 8 and shown defective in those with the early aging disorder Werner syndrome. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome.

## **CHROMOSOMAL LOCATION**

Genetic locus: TUSC3 (human) mapping to 8p22; Tusc3 (mouse) mapping to 8 A4.

## SOURCE

TUSC3 (D-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 96-115 of TUSC3 of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390566 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

#### **RESEARCH USE**

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

### APPLICATIONS

TUSC3 (D-9) is recommended for detection of TUSC3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

TUSC3 (D-9) is also recommended for detection of TUSC3 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for TUSC3 siRNA (h): sc-77535, TUSC3 siRNA (m): sc-154808, TUSC3 shRNA Plasmid (h): sc-77535-SH, TUSC3 shRNA Plasmid (m): sc-154808-SH, TUSC3 shRNA (h) Lentiviral Particles: sc-77535-V and TUSC3 shRNA (m) Lentiviral Particles: sc-154808-V.

Molecular Weight (predicted) of TUSC3: 40 kDa.

Molecular Weight (observed) of TUSC3: 43 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218 or RT-4 whole cell lysate: sc-364257.

#### **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<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (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<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

#### DATA





TUSC3 (D-9): sc-390566. Western blot analysis of TUSC3 expression in SK-BR-3 whole cell lysate. TUSC3 (D-9): sc-390566. Western blot analysis of TUSC3 expression in RT-4 whole cell lysate.

#### **SELECT PRODUCT CITATIONS**

- Ren, Y., et al. 2020. TUSC3 induces drug resistance and cellular stemness via hedgehog signaling pathway in colorectal cancer. Carcinogenesis 41: 1755-1766.
- Zaidi, S.A.A., et al. 2024. TUSC3, p53 and p21 genetic association with development of oral submucous fibrosis and oral squamous cell carcinoma among addictive tobacco chewers of Pakistan. BMC Oral Health 24: 780.

### **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 for detailed protocols and support products.