SANTA CRUZ BIOTECHNOLOGY, INC.

TSC-22 D2 (S-17): sc-55409

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Transforming growth factorβ-stimulated clone-22 (TSC-22) acts as a transcriptional regulator to modulate cell growth and differentiation as well as cell death. TSC-22 contains a leucine zipper domain as well as a nuclear export signal, resulting in cytoplasmic localization in living cells. However, concomitant with the induction of apoptosis, TSC-22 translocates from the cytoplasm to the nucleus and shows transcriptional regulatory activity. TSC-22 acts as a major downstream component in both the TGFβ pathway and the PPARγ signaling pathway. The association of these two pathways with tumor suppression and the significant downregulation of TSC-22 mRNA in various cancer types implies an antiproliferative role for TSC-22. TSC-22 D2 (TSC22 domain family protein 2) also known as TILZ4 is a 780 amino acid protein that is related to TSC-22 and is involved in adaptation of renal cells to hypertonicity, suggesting a possible role in signal transduction. Three isoforms exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TSC22D2 (human) mapping to 3q25.1; Tsc22d2 (mouse) mapping to 3 D.

SOURCE

TSC-22 D2 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TSC-22 D2 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-55409 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSC-22 D2 (S-17) is recommended for detection of TSC-22 D2 of human and, to a lesser extent, mouse and rat 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).

TSC-22 D2 (S-17) is also recommended for detection of TSC-22 D2 in additional species, including canine and porcine.

Suitable for use as control antibody for TSC-22 D2 siRNA (h): sc-63171, TSC-22 D2 siRNA (m): sc-63172, TSC-22 D2 shRNA Plasmid (h): sc-63171-SH, TSC-22 D2 shRNA Plasmid (m): sc-63172-SH, TSC-22 D2 shRNA (h) Lentiviral Particles: sc-63171-V and TSC-22 D2 shRNA (m) Lentiviral Particles: sc-63172-V.

Molecular Weight of TSC-22 D2: 79 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.

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.