

TSC-22 D4 (L-20): sc-55411

BACKGROUND

Transforming growth factor β -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 TGF β pathway and the PPAR γ 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 D4 (TSC22 domain family protein 4), also known as TILZ2 or THG-1, is a 395 amino acid protein that is related to TSC-22 and functions as a transcriptional repressor.

REFERENCES

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- Daouti, S., et al. 2005. Development of comprehensive functional genomic screens to identify novel mediators of osteoarthritis. *Osteoarthr. Cartil.* 13: 508-518.
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CHROMOSOMAL LOCATION

Genetic locus: TSC22D4 (human) mapping to 7p22.1.

SOURCE

TSC-22 D4 (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TSC-22 D4 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55411 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSC-22 D4 (L-20) is recommended for detection of TSC-22 D4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

TSC-22 D4 (L-20) is also recommended for detection of TSC-22 D4 in additional species, including equine and canine.

Suitable for use as control antibody for TSC-22 D4 siRNA (h): sc-63173, TSC-22 D4 shRNA Plasmid (h): sc-63173-SH and TSC-22 D4 shRNA (h) Lentiviral Particles: sc-63173-V.

Molecular Weight of TSC-22 D4: 41 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

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.

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.


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Try **TSC-22 D4 (JJ-2): sc-101193**, our highly recommended monoclonal alternative to TSC-22 D4 (L-20).