

TGF α (V-15): sc-27155

BACKGROUND

Transforming growth factor α (TGF α) is an acid- and heat-stable 50 amino acid protein originally found in rodents and humans. TGF α is 33% homologous at the amino acid level to epidermal growth factor (EGF). TGF α binds to the EGF receptor, mediates tyrosine phosphorylation of the receptor and promotes anchorage-independent growth of normal rat fibroblasts in soft agar in the presence of transforming growth factor β . TGF α is secreted by a variety of transformed cells and tumors, embryonic cells and some normal adult cells. TGF α bioactivity has been found in the urine of cancer patients. It has been suggested that it may act as an autocrine growth factor for the induction or maintenance of malignancy.

REFERENCES

1. Marquardt, H., et al. 1983. Transforming growth factors produced by retrovirus-transformed rodent fibroblasts and human melanoma cells: amino acid sequence homology with epidermal growth factor. Proc. Natl. Acad. Sci. USA 80: 4684-4688.
2. Reynolds, F.H., Jr., et al. 1983. Human transforming growth factors induce tyrosine phosphorylation of EGF receptors. Nature 292: 259-262.

CHROMOSOMAL LOCATION

Genetic locus: TGFA (human) mapping to 2p13.3; Tgfa (mouse) mapping to 6 D1.

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-27155 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

SOURCE

TGF α (V-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TGF α of human origin.

APPLICATIONS

TGF α (V-15) is recommended for detection of precursor and mature TGF α 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). TGF α (V-15) is also recommended for detection of precursor and mature TGF α in additional species, including equine, canine, bovine and porcine. Suitable for use as control antibody for TGF α siRNA (h): sc-39423, TGF α siRNA (m): sc-39424, TGF α shRNA Plasmid (h): sc-39423-SH, TGF α shRNA Plasmid (m): sc-39424-SH, TGF α shRNA (h) Lentiviral Particles: sc-39423-V and TGF α shRNA (m) Lentiviral Particles: sc-39424-V.

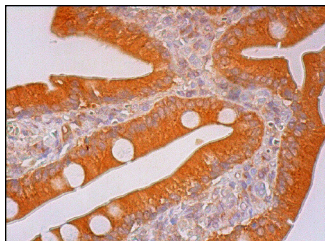
Molecular Weight of TGF : 5.5 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or SW480 cell lysate: sc-2219.

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



TGF α (V-15): sc-27155. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells.

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.

PROTOCOLS

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


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Satisfaction
Guaranteed

Try TGF α (D-6): sc-374433 or TGF α (P/T1): sc-57447, our highly recommended monoclonal alternatives to TGF α (V-15).