

TGF α (H-50): sc-9043

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.

CHROMOSOMAL LOCATION

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

SOURCE

TGF α (H-50) is a rabbit polyclonal antibody raised against amino acids 40-89 of TGF α of human origin.

PRODUCT

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

APPLICATIONS

TGF α (H-50) 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), 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).

TGF α (H-50) is also recommended for detection of precursor and mature TGF α in additional species, including equine, canine, bovine, porcine and avian.

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 α precursor: 13-30 kDa.

Molecular Weight of mature TGF α : 6 kDa.

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

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

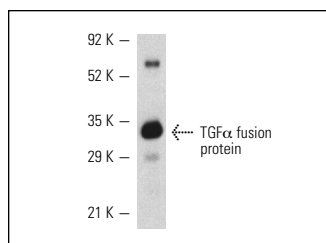
PROTOCOLS

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

RESEARCH USE

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

DATA



TGF α (H-50): sc-9043. Western blot analysis of human recombinant TGF α fusion protein.

SELECT PRODUCT CITATIONS

- Baker, C.H., et al. 2002. Blockade of epidermal growth factor receptor signaling on tumor cells and tumor-associated endothelial cells for therapy of human carcinomas. *Am. J. Pathol.* 161: 929-938.
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- Weiss, B., et al. 2010. Vitamin A deficiency associated with enhanced proliferation of bile duct epithelial cells in the rat. *Isr. Med. Assoc. J.* 12: 82-86.
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Try **TGF α (D-6): sc-374433** or **TGF α (P/T1): sc-57447**, our highly recommended monoclonal alternatives to TGF α (H-50).