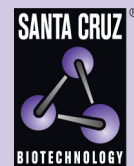


# TGFβ3 (V): sc-82



The Power to Question

## BACKGROUND

Transforming growth factor βs (TGFβs) were originally discovered due to their ability to promote anchorage-independent growth of rat NRK fibroblasts in the presence of TGFβ. TGFβ1, TGFβ2 and TGFβ3 are each synthesized as precursor proteins that are very similar in that each is cleaved to yield a 112 amino acid polypeptide that remains associated with the latent portion of the molecules. TGFβ3 mediates many intercellular interactions that occur during embryonic development, cell differentiation and epithelial homeostasis. TGFβ3 overexpresses in extramammary Paget's disease (EPD) and down regulates in Bowen's disease, indicating that its expression is a useful indicator of tumor activity. TGFβ3 levels strongly correlate with IGF-1 and osteocalcin levels in serum. Significant amounts of TGFβ3 circulation appear to be representative of TGFβ3 expression in bone and may in part be derived from bone. Glucocorticoids may block TGF-β production by modulating mRNA levels and c-Jun activity.

## CHROMOSOMAL LOCATION

Genetic locus: TGFβ3 (human) mapping to 14q24.3, TGFβ2 (human) mapping to 1q41 ; Tgfb3 (mouse) mapping to 12 D2, Tgfb2 (mouse) mapping to 1 H5.

## SOURCE

TGFβ3 (V) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of TGFβ3 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.

TGFβ3 (V) is available conjugated to agarose (sc-82 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

Blocking peptide available for competition studies, sc-82 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TGFβ3 (V) is recommended for detection of precursor and mature TGFβ3, and to a lesser extent precursor and mature TGFβ2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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). TGFβ3 (V) is also recommended for detection of precursor and mature TGFβ3, and to a lesser extent precursor and mature TGFβ2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TGFβ1/2/3 siRNA (h): sc-44146, TGFβ1/2/3 siRNA (m): sc-44147, TGFβ1/2/3 shRNA Plasmid (h): sc-44146-SH, TGFβ1/2/3 shRNA Plasmid (m): sc-44147-SH, TGFβ1/2/3 shRNA (h) Lentiviral Particles: sc-44146-V and TGFβ1/2/3 shRNA (m) Lentiviral Particles: sc-44147-V.

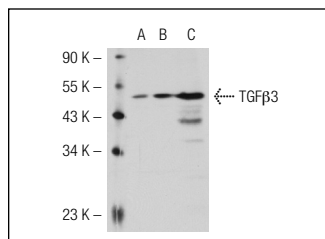
Molecular Weight of mature TGFβ3: 12.5 kDa.

Molecular Weight of TGFβ3 precursor: 47 kDa.

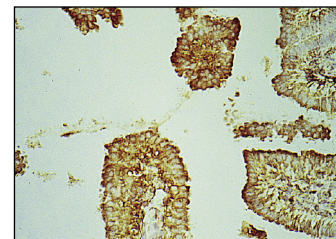
## STORAGE

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

## DATA



TGFβ3 (V): sc-82. Western blot analysis of TGFβ3 expression in non-transfected 293T: sc-117752 (A), human TGFβ3 transfected 293T: sc-113487 (B) and MCF7 (C) whole cell lysates.



TGFβ3 (V): sc-82. Immunoperoxidase staining of formalin fixed, paraffin-embedded porcine small intestine tissue. Kindly provided by Laurie A. Jaeger.

## SELECT PRODUCT CITATIONS

- Gupta, A., et al. 1996. Differential expression of β transforming growth factors (TGFβ1, TGFβ2, and TGFβ3) and their receptors (type I and type II) in peri-implantation porcine conceptuses. *Biol. Reprod.* 55: 796-802.
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- Bottoms, S.E., et al. 2010. Tgf-β isoform specific regulation of airway inflammation and remodelling in a murine model of asthma. *PLoS ONE* 5: e9674.
- Wehrhan, F., et al. 2010. Skin repair using a porcine collagen I/III membrane-vascularization and epithelialization properties. *Dermatol. Surg.* 36: 919-930.
- Pedersen, M.O., et al. 2010. Bio-released gold ions modulate expression of neuroprotective and hematopoietic factors after brain injury. *Brain Res.* 1307: 1-13.
- Erbüyük, K., et al. 2010. Levosimendan up-regulates transforming growth factor-β and smad signaling in the aorta in the early stage of sepsis. *Ulus. Travma Acil Cerrahi Derg.* 16: 293-299.
- Mallarino, R., et al. 2011. Two developmental modules establish 3D beak-shape variation in Darwin's finches. *Proc. Natl. Acad. Sci. USA* 108: 4057-4062.

## RESEARCH USE

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



Try **TGFβ3 (B-11): sc-166861** or **TGFβ3 (G-9): sc-166833**, our highly recommended monoclonal alternatives to TGFβ3 (V). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **TGFβ3 (B-11): sc-166861**.