

TGF β RIII (H-280): sc-28975

BACKGROUND

A total of three members of the TGF β family, TGF β 1, TGF β 2 and TGF β 3, have been identified in mammals. Each is synthesized as a latent precursor that is subsequently cleaved forming the 112 amino acid growth factor which becomes active upon dimerization. TGF β s mediate their activity by high affinity binding to the type II receptor transmembrane protein with a cytoplasmic serine-threonine kinase domain. TGF β RIII (transforming growth factor β receptor type 3), also known as TGFBR3 or TGF β -R3, is an 850 amino acid secreted and single-pass type I membrane protein that contains one ZP domain and may assist in capturing TGF β for presentation to signaling receptors. TGF β RIII undergoes post-translational modification by glycosaminoglycan groups (GAG) and is encoded by a gene that maps to human chromosome 1p22.1.

REFERENCES

1. Anzano, M.A., et al. 1983. Sarcoma growth factor from conditioned medium of virally transformed cells is composed of both type α and type β transforming growth factors. Proc. Natl. Acad. Sci. USA 80: 6264-6268.
2. Derynck, R., et al. 1985. Human transforming growth factor- β cDNA sequence and expression in tumor cell lines. Nature 316: 701-705.

CHROMOSOMAL LOCATION

Genetic locus: TGFBR3 (human) mapping to 1p22.1; Tgfb3 (mouse) mapping to 5 E5.

SOURCE

TGF β RIII (H-280) is a rabbit polyclonal antibody raised against amino acids 511-790 mapping near the C-terminus of TGF β RIII 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 β RIII (H-280) is recommended for detection of TGF β RIII 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), 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 β RIII (H-280) is also recommended for detection of TGF β RIII in additional species, including canine and bovine.

Suitable for use as control antibody for TGF β RIII siRNA (h): sc-40224, TGF β RIII siRNA (m): sc-40225, TGF β RIII shRNA Plasmid (h): sc-40224-SH, TGF β RIII shRNA Plasmid (m): sc-40225-SH, TGF β RIII shRNA (h) Lentiviral Particles: sc-40224-V and TGF β RIII shRNA (m) Lentiviral Particles: sc-40225-V.

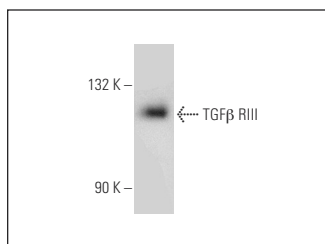
Molecular Weight of TGF β RIII: 100-200 kDa.

Positive Controls: F9 cell lysate: sc-2245 or ECV304 cell lysate: sc-2269.

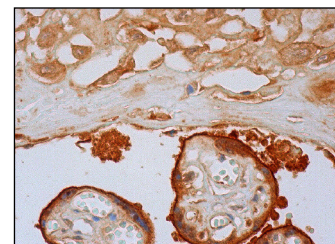
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



TGF β RIII (H-280): sc-28975. Western blot analysis of TGF β RIII expression in F9 whole cell lysate.



TGF β RIII (H-280): sc-28975. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing membrane and cytoplasmic staining of trophoblastic cells and decidual 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.



Try **TGF β RIII (A-4): sc-74511**, our highly recommended monoclonal alternative to TGF β RIII (H-280). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **TGF β RIII (A-4): sc-74511**.