



20190926BB

Anti-Human TGF beta R2 (#4F14)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

| | |
|------------------|----------------------------|
| Cat.-no.: | 101-M178 |
| Size: | 100 µg |
| Lot. No.: | According to product label |

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with recombinant human TGF-beta R2 extra cellular domain. IgG1 fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Target Background

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|---------------------------|--|
| Synonyms (Target): | TGFBR2; AAT3; FAA3; MFS2; RIIC; LDS1B; LDS2B; TAAD2; TGFR-2; TGFbeta-RII |
|---------------------------|--|

Most cell types express three sizes of receptors for TGF-beta. These are designated Type I (53 kDa), Type II (70 - 85 kDa), and Type III (250 - 350 kDa). The Type I receptor is a membrane-bound serine/threonine kinase that apparently requires the presence of the Type II receptor to bind TGF-beta. The Type II receptor is also a membrane-bound serine/threonine kinase that binds TGF-beta1 and TGF-beta 3 with high affinity and TGF-beta 2 with much lower affinity. The Type I and Type II receptors together form a heterodimeric signaling complex that is essential for the transduction of the anti-proliferative signals of TGF-beta. The Type III receptor is a transmembrane proteoglycan with a large extracellular domain and a 43 amino acid residue cytoplasmic domain. The cytoplasmic domain of the Type III receptor lacks an obvious signaling motif and the receptor may not be involved directly in signal transduction.

Database References Target

| | |
|------------------------|----------------|
| Protein RefSeq: | NP_001020018.1 |
| Uniprot ID: | P37173 |
| mRNA RefSeq: | NM_001024847 |

Product Specifications

| | |
|------------------------------|--|
| Host | Mouse |
| Reactivity against | Human |
| Clonality | Monoclonal Antibody |
| Clone | (#4F14) |
| Isotype | IgG1 |
| Purification | Protein G chromatography |
| Antigen | recombinant human TGF-beta RII EC domain |
| Formulation | lyophilized |
| Reconstitution buffer | PBS (sterile) |

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody was selected for its ability to detect human TGF-beta RII. No cross reactivity was found to rh TGF-beta RIII.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB, IHC (P)

Recommended usage:

WB: 1:100-1000

IHC (Paraffin): 1:50-200

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



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Application/Handling

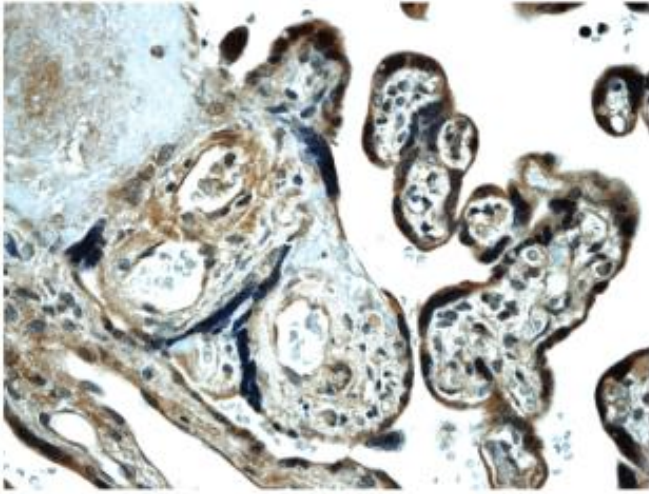


Fig. 1: Human placenta (formalin fixed and paraffin embedded) section is subjected to IHC using #101-M178.