

## Datasheet for ABIN114558

# anti-TGFB1 antibody





#### Overview

Quantity:	0.5 mg
Target:	TGFB1
Reactivity:	Human, Sheep
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This TGFB1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Enzyme Immunoassay (EIA), Functional Studies (Func)

### **Product Details**

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Immunogen:	TGF-beta from Human platelets.	
Clone:	TB21	
Isotype:	lgG1	
Specificity:	This antibody detects Transforming Growth Factor beta/TGF beta.	
Purification:	Affinity Chromatography on Protein G.	
Target Details		

Target:	TGFB1
Alternative Name:	TGFB1 (TGFB1 Products)

#### Target Details

Background:

TGF beta 1 (Transforming Growth Factor Beta 1) is a multifunctional peptide capable of influencing cell proliferation, differentiation, and other functions in a wide range of cell types. Transformed as well as non neoplastic tissues, release transforming growth factors, and essentially all cells possess a specific TGF beta 1 receptor. The multimodal nature of TGF beta 1 is seen in its ability to stimulate or inhibit cellular proliferation. TGF beta 1 plays a fundamental role in tissue growth and differentiation involvement in adipogenesis, myogenesis, chondrogenesis, osteogenesis, epithelial cell differentiation and immune cell function. The C-terminal 112 amino acids constitute the mature protein. Synonyms: TGF-beta-1, TGFB, Transforming growth factor beta-1

Gene ID:

7040

NCBI Accession:

NP\_000651

UniProt:

P01137

Pathways:

EGFR Signaling Pathway, Dopaminergic Neurogenesis, Cellular Response to Molecule of Bacterial Origin, Glycosaminoglycan Metabolic Process, Regulation of Leukocyte Mediated Immunity, Regulation of Muscle Cell Differentiation, Positive Regulation of Immune Effector Process, Cell-Cell Junction Organization, Production of Molecular Mediator of Immune Response, Ribonucleoside Biosynthetic Process, Skeletal Muscle Fiber Development, Regulation of Carbohydrate Metabolic Process, Protein targeting to Nucleus, Autophagy, Cancer Immune Checkpoints

#### Application Details

**Application Notes:** 

ELISAThis antibody recognizes both Human platelet-derived and recombinant TGF-beta in ELISA. Functional AssayThis antibody neutralizes TGF-beta activity in vitro, in an inhibition assay of CCL/64 cellgrowth and neutralizes the growth promoting action of TGF-beta in the NRK-49F colonyforming assay. The effect of micro-injection of this antibody into one blastomere of two cellstage Xenopus embryos indicated that it was able to neutralize effectively the bioactivity ofTGF-beta in vivo. Immunohistochemistry on FFPE and Frozen SectionsThis antibody has been used to demonstrate TGF-beta in ovine ovarian tissue and humanbreast carcinoma at a dilution of 1: 1000. As a consequence of the intense staining of theerythrocytes it is possible to locate a single cell within the ovarian stroma making it usefulin locating very fine capillary networks within tissue. Western Blotting5-20 ng/mL will allow visualization of 100 ng/lane of TGF-beta. Reacts with dimeric (25 Kd)

Restrictions:

For Research Use only

#### Handling

Reconstitution:	Restore in 0.5 mL double distilled water.
Concentration:	1.0 mg/mL
Buffer:	0.01 M PBS, pH 7.0 without preservatives.
Preservative:	Without preservative
Handling Advice:	This product is photosensitive and should be protected from light
Storage:	4 °C
Storage Comment:	Store the antibody at 2 - 8 °C. DO NOT FREEZE!

#### **Publications**

#### Product cited in:

Moesgaard, Aupperle, Rajamäki, Falk, Rasmussen, Zois, Olsen: "Matrix metalloproteinases (MMPs), tissue inhibitors of metalloproteinases (TIMPs) and transforming growth factor-? (TGF-?) in advanced canine myxomatous mitral valve disease." in: **Research in veterinary science**, Vol. 97, Issue 3, pp. 560-7, (2015) (PubMed).

Yue, Goldstein, Hollingsworth, Kaul, Brand, Haab: "The prevalence and nature of glycan alterations on specific proteins in pancreatic cancer patients revealed using antibody-lectin sandwich arrays." in: **Molecular & cellular proteomics : MCP**, Vol. 8, Issue 7, pp. 1697-707, (2009) (PubMed).

Bukowska, Lendeckel, Krohn, Keilhoff, ten Have, Neumann, Goette: "Atrial fibrillation down-regulates renal neutral endopeptidase expression and induces profibrotic pathways in the kidney." in: Europace: European pacing, arrhythmias, and cardiac electrophysiology: journal of the working groups on cardiac pacing, arrhythmias, and cardiac cellular electrophysiology of the European Society of Cardiology, Vol. 10, Issue 10, pp. 1212-7, (2008) (PubMed).

Aupperle, März, Thielebein, Schoon: "Expression of transforming growth factor-beta1, -beta2 and -beta3 in normal and diseased canine mitral valves." in: **Journal of comparative pathology**, Vol. 139, Issue 2-3, pp. 97-107, (2008) (PubMed).

Jaeger, Koczan, Thiesen, Ibrahim, Gross, Spang, Kunz: "Gene expression signatures for tumor progression, tumor subtype, and tumor thickness in laser-microdissected melanoma tissues." in: Clinical cancer research: an official journal of the American Association for Cancer Research, Vol. 13, Issue 3, pp. 806-15, (2007) (PubMed).

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