

Product datasheet for **DM1047**

TGF beta 1 (TGFB1) Mouse Monoclonal Antibody [Clone ID: TB21]

Product data:

Product Type:	Primary Antibodies
Clone Name:	TB21
Applications:	ELISA, FN, IHC, WB
Recommended Dilution:	ELISA: This antibody recognizes both Human platelet-derived and recombinant TGF-beta in ELISA. Functional Assay: This antibody neutralizes TGF-beta activity in vitro, in an inhibition assay of CCL/64 cell growth and neutralizes the growth promoting action of TGF-beta in the NRK-49F colony forming assay. The effect of micro-injection of this antibody into one blastomere of two cell stage Xenopus embryos indicated that it was able to neutralize effectively the bioactivity of TGF-beta <i>in vivo</i> . Immunohistochemistry on FFPE and Frozen Sections: This antibody has been used to demonstrate TGF-beta in ovine ovarian tissue and Human breast carcinoma at a dilution of 1/1000. As a consequence of the intense staining of the erythrocytes it is possible to locate a single cell within the ovarian stroma making it useful in locating very fine capillary networks within tissue. Western Blotting: 5-20 ng/ml will allow visualization of 100 ng/lane of TGF-beta. In another Western Blot experiment the antibody used at 5-20 ng/ml, detected TGF-β at 200 ng/lane.
Reactivity:	Human, Sheep
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	TGF-beta from Human platelets.
Specificity:	This antibody detects Transforming Growth Factor beta/TGF beta. Western blotting demonstrated that this antibody reacts with the dimeric (25 kDa) and monomeric (12.5 kDa.) forms of TGF-β under both non-reducing and reducing conditions respectively. This antibody recognizes both human platelet-derived and recombinant TGF-β in ELISA.



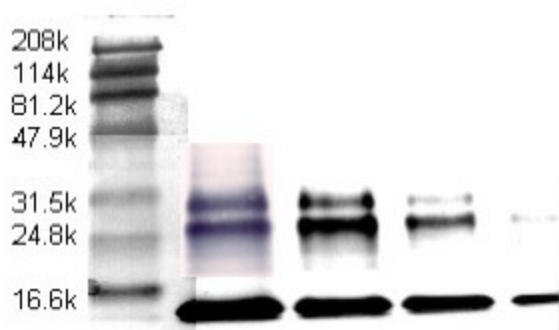
[View online »](#)

Formulation:	0.01M PBS, pH 7.0 without preservatives State: Azide Free State: Lyophilized purified IgG fraction
Reconstitution Method:	Restore in 0.5 ml double distilled water.
Concentration:	1.0 mg/ml (after reconstitution)
Purification:	Affinity Chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	transforming growth factor beta 1
Database Link:	Entrez Gene 7040 Human P01137

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: TGFB, Transforming growth factor beta-1, TGF-beta-1

Product images:



Western blot result of the antibody used at 2ug/mL to detect platelet derived TGF-β at 12ug/lane (lane 2) 6ug/lane (lane 3), 3 ug/lane (lane 4) and 1ug/mL (lane 5) with 4- chlorol-naphthol as substrate. The bottom band is the 12.5KD TGF-β monomer, the mid-band is the 25KD TGF-β dimer and the up band is TGF-β with signal peptide. Lane 1 is molecular weight markers.