

Datasheet: MCA797

Description:	MOUSE ANTI HUMAN TGF BETA
Specificity:	TGF BETA
Other names:	TRANSFORMING GROWTH FACTOR BETA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	TB21
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	■			
Immunohistology - Frozen	■			
Immunohistology - Paraffin (2)	■			
ELISA	■			
Immunoprecipitation			■	
Western Blotting	■			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1) **Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

(2) **Mouse anti Human TGF β antibody, clone TB21 has been used successfully on FFPE tissues without pretreatment e.g. [Bob et al.](#) and [Booth et al.](#). Others have used either [citrate pH6.0](#), [EDTA pH8.0](#) or [pepsin](#) mediated antigen retrieval.**

Target Species	Human
Species Cross Reactivity	Reacts with: Rat, Sheep, Mustelid, Mink, Rabbit, Mouse, Bovine N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human Transforming Growth Factor Beta 1 from platelets.
External Database Links	UniProt: P01137 Related reagents Entrez Gene: 7040 TGFB1 Related reagents
Synonyms	TGFB
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the SP2/0-Ag 14 mouse myeloma cell line.
Specificity	Mouse anti Human TGF beta antibody, clone TB21 recognizes both human platelet-derived and recombinant TGF-beta1 in enzyme-linked immunosorbent assay (ELISA). Mouse anti Human TGF beta antibody, clone TB21 demonstrates neutralising activity against TGF-beta1 in cell proliferation assays. Mouse anti Human TGF beta antibody, clone TB21 has been demonstrated to react with dimeric (~25 kDa) or monomeric (~12.5 kDa) molecules of natural TGF-beta1 under non-reducing and reducing conditions respectively.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
Histology Positive Control Tissue	Human Breast Carcinoma
References	1. Bob, F. <i>et al.</i> (2014) Immunohistochemical study of tubular epithelial cells and vascular endothelial cells in glomerulonephritis. Ren Fail. 36: 1208-14. 2. Lehr, E.J. <i>et al.</i> (2010) Decellularization reduces immunogenicity of sheep pulmonary artery vascular patches. J Thorac Cardiovasc Surg. 141: 1056-62. 3. Westermann, D. <i>et al.</i> (2011) Cardiac inflammation contributes to changes in the extracellular matrix in patients with heart failure and normal ejection fraction. Circ Heart Fail. 4: 44-52. 4. Brown, H. <i>et al.</i> (1999) Cytokine expression in the brain in human cerebral malaria. J Infect Dis. 180: 1742-6. 5. Helske, S. <i>et al.</i> (2006) Possible role for mast cell-derived cathepsin G in the adverse remodelling of stenotic aortic valves. Eur Heart J. 27: 1495-504. 6. Hsiao, Y.W. <i>et al.</i> (2004) Tumor-infiltrating lymphocyte secretion of IL-6 antagonizes tumor-derived TGF-beta 1 and restores the lymphokine-activated killing activity. J Immunol. 172: 1508-14. 7. Kingston, P.A. <i>et al.</i> (2003) Adenovirus-mediated gene transfer of transforming growth factor-beta3, but not transforming growth factor-beta1, inhibits constrictive remodeling and reduces luminal loss after coronary angioplasty. Circulation. 108: 2819-25. 8. Lavaud, S. <i>et al.</i> (2001) Inflammation is probably not a prerequisite for renal interstitial fibrosis in normoglycemic obese rats. Am J Physiol Renal Physiol. 280: F683-94. 9. Sheu, B.C. <i>et al.</i> (2001) Predominant Th2/Tc2 polarity of tumor-infiltrating lymphocytes in human cervical cancer. J Immunol. 167: 2972-8. 10. Hopkinson, A. <i>et al.</i> (2006) Amniotic membrane for ocular surface reconstruction: donor variations and the effect of handling on TGF-beta content. Invest Ophthalmol Vis Sci. 47: 4316-22. 11. Sumpter, T.L. <i>et al.</i> (2007) Regulation of the NFAT pathway discriminates CD4+CD25+ regulatory T cells from CD4+CD25- helper T cells. J Leukoc Biol. 83: 708-17. 12. Braun, N. <i>et al.</i> (2011) Difference in the expression of hormone receptors and fibrotic markers

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Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

6 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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