

ANTIGENIX AMERICA Inc
1-800-558-1008
PRODUCT INFORMATION SUMMARY

Anti-TGF Beta 1

Purified Antibody	Product Number M700020 (TB21)	0.1 mg
Purified Antibody	Product Number M700022 (2C5)	0.1 mg

ANTIGEN DISTRIBUTION AND SPECIFICITY:

Transforming Growth Factor Beta 1 (TGF Beta 1) is a member of a family of closely related polypeptide factors. Initially described as a transforming agent, this cytokine has since been found to have numerous activities including regulation of cell growth, proliferation and differentiation, chemotactic recruitment of cells, inflammatory and immunosuppressive mediator (1). TGF Beta 1 is a 25 kDa disulfide-linked homodimer. Three forms have been identified in humans and specific high affinity receptors for TGF Beta are found on all cell types (2, 3).

ANTIGENIX AMERICA anti-TGF Beta 1 reveals two immunoreactive bands on western blot at 25 kDa and 12.5 kDa from acid/ethanol extracts of human platelets. This monoclonal antibody is reactive in direct ELISA with purified TGF Beta from both human and recombinant sources. Functional neutralization has been observed (see data p.2)

CLONE:

TB-21 and 2C5 were derived from hybridization of murine myeloma (SP2/0) cells with spleen cells from BALB/c mice immunized with native Transforming Growth Factor Beta from human platelets. Purified from murine ascites fluid.

Immunoglobulin chain composition: MOUSE IgG1, kappa light chains.

HANDLING AND STORAGE:

Before opening vial: Gently tap vial on countertop to remove lyophilized material that may have adhered to top of vial. Lyophilized, purified monoclonal antibody should be reconstituted with distilled water (200 uL). Reagent will reconstitute as 0.01M PBS. Product is provided free of any carrier protein or preservative to facilitate use in ELISA or functional assays. These preparations should be further diluted in a protein-containing or other stabilizing medium with addition of a preservative (0.1% sodium azide) for long-term storage (as applicable with intended use). For long-term storage, small aliquots of undiluted reagent may be frozen. Avoid repeat freeze-thaw cycles. All reagents in a liquid state should be stored at 2-8° C when not in use.

RESEARCH APPLICATIONS:

Functional neutralization of TGF Beta 1 activity.

Biochemical identification of TGF Beta 1 in body fluids and tissue culture medium.

Immunoassay development and immunohistochemical staining.

Both clones have been observed to stain paraffin-embedded tissue.

NEUTRALIZING ACTIVITY:

Five micrograms of anti-TGF Beta 1 clone TB-21 or 2C5, neutralizes one nanogram of TGF Beta 1 at activity of 78.9% (Neutralization Index 0.789). Neutralizing effect was demonstrated against inhibition of mink lung epithelial cell (CCL/64) growth.

Five micrograms of TB-21 or 2C5 neutralized one nanogram TGF Beta-1 at activity of 68.8% Neutralization Index 0.688), demonstrated effect on proliferation of NRK-49F cell line. NRK-49F is a Normal Rat Kidney Fibroblast Cell Line that demonstrates anchorage-independent growth in presence of TGF Beta- 1.

WARRANTY:

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product.

SELECTED REFERENCES:

1.Wahl, S.M., D.A. Hunt, L.M. Wakefield and R.K. Assoian. 1986 Transforming factor type Beta induces monocyte chemotaxis and growth factor production. Proc. Natl. Acad. Sci. USA 84:5788.

2.Sporn, M.B., A.B. Roberts, L.M. Wakefield, and R.K. Assoian. 1986. Transforming growth factor Beta: biological function and chemical structure. Science 233:532.

3.Sporn, M.B., A.B. Roberts, L.M. Wakefield, and B. deCrombrugge. 1987. Some recent advances in the chemistry and biology of transforming growth factor Beta. J. Cell Biol. 105:1039.

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