

DESCRIPTION

Specificity	Detects bovine, chicken, mouse, and human TGF- β in ELISAs and Western blots. It recognizes human TGF- β 1, TGF- β 2, and TGF- β 3.
Source	Monoclonal Mouse IgG ₁ Clone # 1D11
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Bovine bone-derived TGF- β 1 and TGF- β 2
Endotoxin Level	<0.10 EU per 1 μ g of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

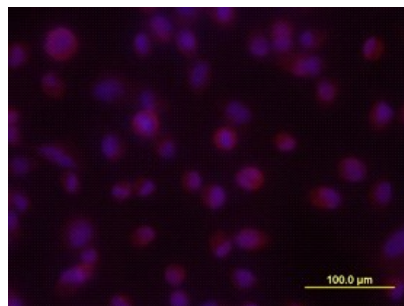
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μ g/mL	Recombinant Human TGF- β 1 (Catalog # 240-B) under non-reducing conditions only
Immunocytochemistry	8-25 μ g/mL	See Below
Immunohistochemistry	8-25 μ g/mL	See Below
Human TGF-β1 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 μ g/mL	TGF- β 1, 2, 3 Antibody (Catalog # MAB1835)
ELISA Detection	0.1-0.4 μ g/mL	TGF- β 1 Biotinylated Antibody (Catalog # BAF240)
Standard		Recombinant Human TGF- β 1 (Catalog # 240-B)
Neutralization		Measured by its ability to neutralize TGF- β 1 inhibition of IL-4-dependent proliferation in the HT-2 mouse T cell line. Tsang, M. <i>et al.</i> (1990) Lymphokine Res. 9:607. The Neutralization Dose (ND ₅₀) is typically 0.25-1.25 μ g/mL in the presence of 1 ng/mL Recombinant Human TGF- β 1 and 7.5 ng/mL Recombinant Mouse IL-4.
Binding Inhibition		Dasch, J.R. <i>et al.</i> (1994) J. Immunol. 142:1536.

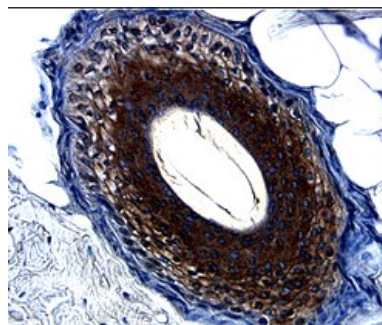
DATA

Immunocytochemistry



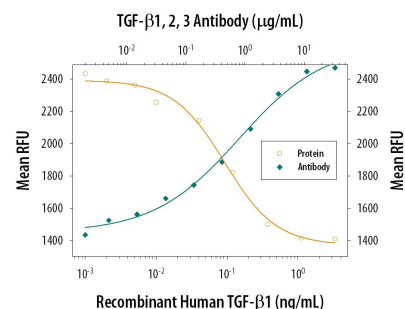
TGF- β in PC-3 Human Cell Line. TGF- β 1, 2, 3 was detected in immersion fixed PC-3 human prostate cancer cell line using 10 μ g/mL Mouse Anti-TGF- β 1, 2, 3 Monoclonal Antibody (Catalog # MAB1835) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



TGF- β in Human Skin. TGF- β 1, 2, 3 was detected in immersion fixed paraffin-embedded human skin using 25 μ g/mL Mouse Anti-TGF- β 1, 2, 3 Monoclonal Antibody (Catalog # MAB1835) overnight at 4 °C. Tissues was stained using the Anti-Mouse HRP-DAB Cell and Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with Haematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Neutralization



TGF- β 1 Inhibition of IL-4-dependent Cell Proliferation and Neutralization by TGF- β 1, 2, 3 Antibody. Recombinant Human TGF- β 1 (Catalog # 240-B) inhibits Recombinant Mouse IL-4 (Catalog # 404-ML) induced proliferation in the HT-2 mouse T cell line in a dose-dependent manner (orange line). Inhibition of Recombinant Mouse IL-4 (7.5 ng/mL) activity elicited by Recombinant Human TGF- β 1 (1 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-TGF- β 1, 2, 3 Monoclonal Antibody (Catalog # MAB1835). The ND₅₀ is typically 0.25-1.25 μ g/mL.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 mg/mL in sterile PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

TGF- β 1, -2, and -3 are a closely related group of proteins (70-80% sequence homology) that are produced by many cell types and function as growth and differentiation factors. The active forms of TGF- β 1, -2, and -3 are disulfide-linked homodimers.

References:

1. Ayala A. *et al.* (1992) *FASEB J.* **6**:A1604.
2. Roberts A.B. and Sporn M.B., eds. (1990) *Peptide Growth Factors and Their Receptors I*, Springer-Verlag, 419.
3. Dasch J.R. *et al.* (1989) *J. Immunol.* **142**:1536.