TGF-β5 Antibody

Polyclonal Goat IgG

Catalog Number: AB-245-NA

DESCRIPTION

Specificity	Detects TGF-β5 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with the other TGF-β variants is observed. Neutralizes the biological activity of recombinant amphibian TGF-β5, but not TGF-β1, porcine TGF-β1.2, TGF-β2, or TGF-β3.
Source	Polyclonal Goat IgG
Purification	Protein A or G purified
Immunogen	*S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant amphibian TGF-β5 Gly271-Ser382 Accession # P16176
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

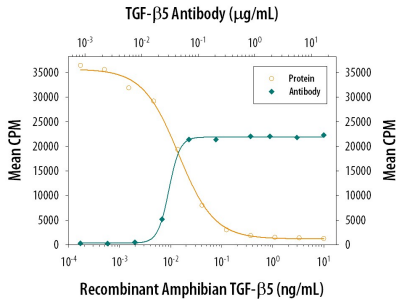
APPLICATIONS

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 µg/mL	Recombinant Amphibian TGF-β5 (Catalog # 245-B5)
Neutralization	Measured by its ability to neutralize TGF-β5 inhibition of IL-4-dependent proliferation in the HT-2 mouse T cell line. Tsang, M. *et al.* (1995) Cytokine **7**:389. The Neutralization Dose (ND_{50}) is typically 0.03-0.08 µg/mL in the presence of 0.1 ng/mL Recombinant Amphibian TGF-β5 and 7.5 ng/mL Recombinant Mouse IL-4.	

DATA

Neutralization



TGF-β5 Inhibition of IL-4-dependent Cell Proliferation and Neutralization by TGF-β5 Antibody. Recombinant Amphibian TGF-β5 (Catalog # 245-B5) 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 Amphibian TGF-β5 (0.1 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-TGF-β5 Polyclonal Antibody (Catalog # AB-245-NA). The ND_{50} is typically

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 1 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
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-β5 is a member of the TGF-β family of growth factors. These proteins are stable, multifunctional factors with a wide variety of effects on the growth and differentiation of virtually all cell types. These actions on growth or differentiation may be stimulatory or inhibitory, depending on the cell type, growth conditions, state of differentiation and on the presence of other growth factors. The full range of *in vitro* biological activities of TGF-β5 has not yet been explored. However, TGF-β1, TGF-β2, TGF-β3, and TGF-β5 have been found to be largely interchangeable in an inhibitory bioassay, and it is anticipated that TGF-β5 will show a spectrum of activities similar to the other TGF-β family members. The *in vivo* role of TGF-β5 is also not known, but the presence of this factor in *Xenopus* embryos, tadpole cells, and adult tissues suggests a role in the mediation of differentiation and development. Similar roles have been suggested for other members of the TGF-β family. To date, the production of TGF-β5 has only been demonstrated in *Xenopus*.