

DESCRIPTION

Source *Spodoptera frugiperda*, Sf21 (baculovirus)-derived amphibian TGF-beta 5 protein
Gly271 -Ser382 & Gln274-Ser382
Accession # P16176

N-terminal Sequence Analysis Gly271 & Gln274

Predicted Molecular Mass 12.6 kDa

SPECIFICATIONS

Activity Measured by its ability to inhibit the IL-4-dependent proliferation of HT-2 mouse T cells. Tsang, M. *et al.* (1995) *Cytokine* 7:389. The ED₅₀ for this effect is 0.01-0.03 ng/mL.

Endotoxin Level <0.10 EU per 1 µg of the protein by the LAL method.

Purity >97%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Formulation Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 20 µg/mL in sterile 4 mM HCl containing 0.1% human or bovine serum albumin.

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.
- 3 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*.

PRODUCT SPECIFIC NOTICES

Triton is a registered trademark of Union Carbide Corp.