

Recombinant Mouse/Rat Mature TGF-beta 1 Protein

Catalog No.: RP00671 Recombinant 2 Publications

Sequence Information

Species **Gene ID** **Swiss Prot**
 Mouse 21803 P04202

Tags

No tag

Synonyms

TGF-
beta1;Tgfb;Tgfb-1;TGFbeta1;CED;DPD1;L
AP;TGFB;TGFBeta;TGFB1

Background

Transforming growth factor beta 1 (TGF β 1) is the prototype of a growing superfamily of peptide growth factors and plays a prominent role in a variety of cellular processes, including cell-cycle progression, cell differentiation, reproductive function, development, motility, adhesion, neuronal growth, bone morphogenesis, wound healing, and immune surveillance. TGF- β 1, TGF- β 2 and TGF- β 3 signal via the same heteromeric receptor complex, consisting of a ligand binding TGF- β receptor type II (T β R-II), and a TGF- β receptor type I (T β R-I). Signal transduction from the receptor to the nucleus is mediated via SMADs. TGF- β expression is found in cartilage, bone, teeth, muscle, heart, blood vessels, hematopoietic cells, lung, kidney, gut, liver, eye, ear, skin, and the nervous system.

Product Information

Source **Purification**
 HEK293 cells $\geq 95\%$ as
determined by SDS-PAGE.

Calculated MW **Observed MW**
 12.81 kDa 15 kDa

Endotoxin

< 0.01 EU/ μ g of the protein by LAL method

Formulation

Lyophilized from a 0.2 μ m filtered solution of 50 mM Glycine, 150 mM NaCl, pH 3.5. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze/thaw cycles.

Basic Information

Description

Recombinant Mouse TGF-beta 1/TGFB1 Protein is produced by Human cells expression system. The target protein is expressed with sequence (Ala279-Ser390) of mouse TGF-beta 1/TGFB1 (Accession #P04202).

Bio-Activity

Measured by its ability to inhibit the IL-4-dependent proliferation of HT-2 Mouse T cells. The ED₅₀ for this effect is 0.054-0.214 ng/mL, corresponding to a specific activity of 4.7×10^6 ~ 1.85×10^7 units/mg.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

Operational Notes

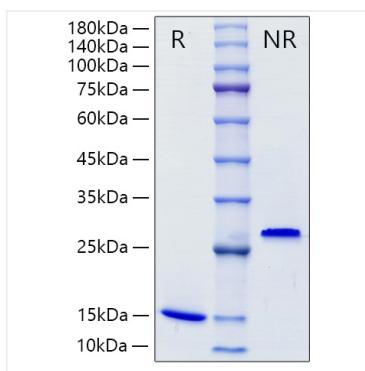
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

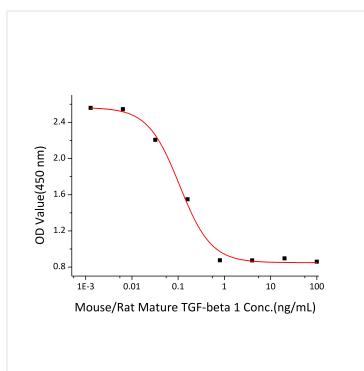
400-999-6126
 cn.market@abclonal.com.cn



Validation Data



Recombinant Mouse/Rat Mature TGF-beta 1 Protein was determined by SDS-PAGE under reducing (R) and non-reducing (NR) conditions.



Recombinant Mouse/Rat Mature TGF-beta 1 inhibit the IL-4-dependent proliferation of HT-2 mouse T cells. The ED₅₀ for this effect is 0.054-0.214 ng/mL, corresponding to a specific activity of $4.7 \times 10^6 \sim 1.85 \times 10^7$ units/mg.