

Recombinant Human Mature TGF-beta 2 Protein

Catalog No.: RP00452 Recombinant

Sequence Information

Species Gene ID Swiss Prot Human 7042 P61812

Tags No tag

Synonyms TGFB2;G-TSF;LDS4;TGF-beta2

Product Information

Source Purification HEK293 cells ≥ 95 % as

determined by SDS-

PAGE.

Calculated MW Observed MW

12.72 kDa 13-15 kDa

Endotoxin

< 1 EU/µg of the protein by LAL method.

Formulation

Lyophilized from a 0.2 µm filtered solution of 4 mM HCl.Contact us for customized product form or formulation.

Reconstitution

Centrifuge the tube 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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

<u>a</u>	400-999-6126
\bowtie	cn.market@abclonal.com.cn
•	www.abclonal.com.cn

Background

This protein belongs a member of the transforming growth factor beta (TGFB) family of cytokines, which are multifunctional peptides that regulate proliferation, differentiation, adhesion, migration, and other functions in many cell types by transducing their signal through combinations of transmembrane type I and type II receptors (TGFBR1 and TGFBR2) and their downstream effectors, the SMAD proteins. Disruption of the TGFB/SMAD pathway has been implicated in a variety of human cancers. The encoded protein is secreted and has suppressive effects of interleukin-2 dependent T-cell growth. Translocation t(1;7)(q41;p21) between this gene and HDAC9 is associated with Peters' anomaly, a congenital defect of the anterior chamber of the eye. The knockout mice lacking this gene show perinatal mortality and a wide range of developmental, including cardiac, defects. Alternatively spliced transcript variants encoding different isoforms have been identified.

Basic Information

Description

Recombinant Human TGF-beta 2 Protein is produced by Human Cell expression system. The target protein is expressed with sequence (Ala303-Ser414) of human TGF-beta 2/TGFB2 (Accession #P61812).

Bio-Activity

Recombinant Human Mature TGF-beta 2 Protein inhibit the IL-4-dependent proliferation of HT-2 mouse T cells. The ED50 for this effect is 0.058-0.232 ng/mL, corresponding to a specific activity of $4.3\times106\sim1.72\times107$ units/mg.

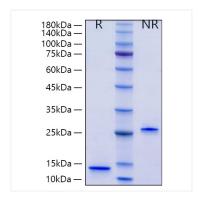
Storage

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

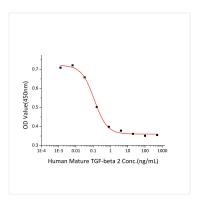
After reconstitution, the protein solution is stable at -20 $^{\circ}$ C for 3 months, at 2-8 $^{\circ}$ C for up to 1 week.

Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human Mature TGF-beta 2 Protein was determined by SDS-PAGE under reducing (R) and non-reducing (NR) conditions.



Recombinant Human Mature TGF-beta 2 Protein inhibit the IL-4-dependent proliferation of HT-2 mouse T cells. The ED $_{50}$ for this effect is 0.058-0.232 ng/mL, corresponding to a specific activity of $4.3\times10^6\sim1.72\times10^7$ units/mg.