

Recombinant Human Latent TGF-beta 2 Protein

Catalog No.: RP03502 Recombinant

Sequence Information

Species Gene ID Swiss Prot Human 7042 P61812-1

Tags

N-His

Synonyms

TGFB2;Transforming growth factor beta-2 proprotein; Cetermin; Glioblastoma-derived T-cell suppressor factor; G-TSF; Cleaved into: Latencyassociated peptide; LAP; Transforming growth factor beta-2; TGF-beta-2

Product Information

Source Purification

HEK293 cells ≥ 95 % as

determined by Tris-Bis PAGE;≥ 95 % as determined by HPLC.

Calculated MW Observed MW

46.6 kDa 40-60 kDa,12-13

kDa

Endotoxin

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

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

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 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

a 400-999-6126

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 Latent TGF-beta 2 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Leu21-Ser414) of Human Latent TGF-beta 2 (Accession #NP_003229.1) fused with with His tag at the N-terminus.

Bio-Activity

Human TGF-beta RII, hFc Tag captured on CM5 Chip via Protein A can bind Human Latent TGF beta 2, His Tag with an affinity constant of 2.21 μ M as determined in SPR assay

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.

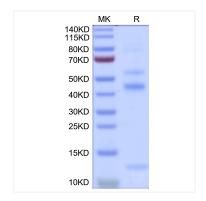
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

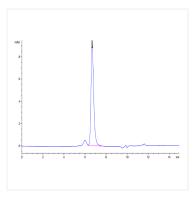
Operational Notes

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

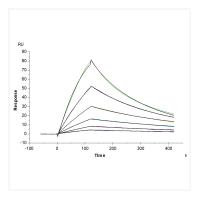
Validation Data



Recombinant Human Latent TGF-beta 2 Protein was determined by Bis-Tris PAGE under reducing conditions with Coomassie Blue.



Recombinant Human Latent TGF-beta 2 Protein is greater than 95% as determined by SEC-HPLC.



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