

Human TGF beta 1 Recombinant Protein

Catalog Number: 14-8348

Also Known As: Transforming Growth Factor beta 1, TGFbeta1, TGF-b1

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Human TGF beta 1 Recombinant Protein

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Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in a sterile environment

Source: CHO cells expressed amino acids ala279 - ser390; accession #BC001180.

Molecular Mass: Mature TGFb1 polypeptide has a predicted molecular mass of 12,794. On reducing SDS-PAGE the protein migrates as a 13 kDa polypeptide and on non-reducing SDS page the cystine-linked homodimer migrates as a 25 kDa protein.

Purity: > 98%, as determined by SDS-PAGE

Endotoxin Level: Less than 0.01 ng/ug cytokine as determined by the LAL assay.

Bioactivity: The ED50 of this protein, as measured by inhibition of IL-4 induced proliferation in HT-2 cells, is less than or equal to 40 pg/mL. This corresponds to a specific activity of greater than or equal to 2.5 x 10e7 Units/mg.

Formulation: Sterile liquid; 0.1 M glycine, pH3.0. 0.1% BSA . 0.22 um filtered.



Temperature Limitation: Store at less than or equal to -70°C.



Batch Code: Refer to Vial



Use By: Refer to Vial

Description

Human TGF beta 1 (Transforming Growth Factor beta 1) is a member of a superfamily of homologous, disulfide-linked, homodimeric proteins that regulate the proliferation and differentiation of normal and transformed cells. Human TGF beta 1 is a 25 kDa protein with each subunit containing 112 aa residues.

Applications Reported

Recombinant human TGF-β1 is biologically active and can inhibit IL-4 induced proliferation of mouse HT-2 cells. Recombinant human TGF-β1 is useful as an ELISA standard.

Applications Tested

The ED50 of this protein, as measured by inhibition of IL-4 induced proliferation in HT-2 cells, is less than or equal to 40 pg/ml. This corresponds to a specific activity of greater than or equal to 2.5 x 10e7 Units/mg.

References

Tan C, Gery I. The unique features of Th9 cells and their products. Crit Rev Immunol. 2012;32(1):1-10.

Bommireddy R, Doetschman T. TGFbeta1 and Treg cells: alliance for tolerance. Trends Mol Med. 2007 Nov;13(11):492-501

Frolik CA, Dart LL, Meyers CA, Smith DM, Sporn MB. Purification and initial characterization of a type beta transforming growth factor from human placenta. Proc Natl Acad Sci U S A. 1983 Jun;80(12):3676-80.

Related Products

14-8109 Human IL-10 Recombinant Protein

34-8069 Human IL-6 Recombinant Protein Carrier-Free

51-7178 Anti-Human IL-17A Alexa Fluor® 647 (Discontinued. Refer to Cat. No. 50-7178) (eBio64CAP17)

88-7344 Human/Mouse TGF beta1 ELISA Ready-SET-Go!® (To Be Discontinued. Refer to 2nd Generation RSG Cat. No. 88-8350)

88-7449 Human/ Mouse TGFb1 ELISA Ready-SET-Go! Kit (See replacement item 88-8350)

88-7876 Human IL-17A ELISPOT Ready-SET-Go!®

88-7976 Human IL-17A (Interleukin-17A, IL17A) ELISA Ready-SET-Go! Kit (See replacement item 88-7176)

88-8111 Mouse Regulatory T Cell Staining Kit #1 (FJK-16s)

88-8999 Human Regulatory T Cell Staining Kit (PCH101)

