

32-20540: Recombinant Human TGF-Beta 1 (HEK293 derived)(Discontinued)

Reactivity : Chicken, Cow, Dog, Human, Monkey, Mouse, Pig, Rabbit, Rat

Alternative Name : Transforming Growth Factor-Beta 1, Differentiation inhibiting factor, Cartilage-inducing factor

Description

Source:HEK293 cells

The three mammalian isoforms of TGF-Beta , TGF-Beta 1, Beta 2, and Beta 3, signal through the same receptor and elicit similar biological responses. They are multifunctional cytokines that regulate cell proliferation, growth, differentiation and motility, as well as synthesis and deposition of the extracellular matrix. They are involved in various physiological processes, including embryogenesis, tissue remodeling and wound healing. They are secreted predominantly as latent complexes, which are stored at the cell surface and in the extracellular matrix. The release of biologically active TGF-Beta isoform from a latent complex involves proteolytic processing of the complex and/or induction of conformational changes by proteins such as thrombospondin-1. TGF-Beta 1 is the most abundant isoform secreted by almost every cell type. It was originally identified for its ability to induce phenotypic transformation of fibroblasts, and recently it has been implicated in the formation of skin tumors. Recombinant Human TGF-Beta 1 derived from HEK293 cells is a 25.0 kDa protein with each subunit containing 112 amino acid residues, linked by a single disulfide bond.

Product Info

Amount : 2 µg / 10 µg

Purification : Purity: >= 98% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : ALDTNYCFSS TEKNCCVRQL YIDFRKDLGW KWIHEPKGYH ANFCLGPCPY IWSLDTQYSK VLALYNQHNP
GASAAPCCVP QALEPLPIVY YVGRKPKVEQ LSNMIVRSCK CS

Application Note

The ED_{50} was determined by TGF-beta1's ability to inhibit the mouse IL-4-dependent proliferation of mouse HT-2 cells is ≤ 0.05 ng/ml, corresponding to a specific activity of $\geq 2 \times 10^7$ units/mg.