10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Recombinant Human TGF-β1 (HEK 293 derived)

Catalog # PBG10439

Specification

Recombinant Human TGF-β1 (HEK 293 derived) - Product Information

Recombinant Human TGF-β1 (HEK 293 derived) - Additional Information

Description
The three mammalian isoforms of TGF-β, TGF-β1, β2, β3, 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-β isoform from a latent complex involves proteolytic processing of the complex and /or induction of conformational changes by proteins such as thrombospondin-1. TGF-β1 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. Human TGF-β1 is a 25.0 kDa protein with each subunit containing 112 amino acid residues, linked by a single disulfide bond.

BiologicalActivity
The ED₅₀ was determined by TGF-beta1's ability to inhibit the M IL-4-dependent proliferation of M HT-2 cells is ≤ 0.05 ng/ml, corresponding to a specific activity of ≥ 2 x 10⁷ units/mg.

Authenticity
Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin
Endotoxin level is <0.1 ng/ μg of protein (<1EU/ μg).

Protein Content
Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage
-20°C

Precautions
Recombinant Human TGF-β1 (HEK 293 derived) is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human TGF-β1 (HEK 293 derived) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot

- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Recombinant Human TGF-β1 (HEK 293 derived) - Images