

**Recombinant Human TGF- $\beta$ 2 (insect derived)**  
**Catalog # PBG10441****Specification**

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**Recombinant Human TGF- $\beta$ 2 (insect derived) - Product Information****Recombinant Human TGF- $\beta$ 2 (insect derived) - Additional Information****Description**

The three mammalian isoforms of TGF- $\beta$ , TGF- $\beta$ 1,  $\beta$ 2,  $\beta$ 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- $\beta$ 2 has been shown to exert suppressive effects on IL-2 dependent T-cell growth, and may also have an autocrine function in enhancing tumor growth by suppressing immuno-surveillance of tumor development. Recombinant human TGF- $\beta$ 2 is a 25.0 kDa protein composed of two identical 112 amino acid polypeptide chains linked by a single disulfide bond.

*Manufactured using (BTI-Tn-5B1-4) cells under license from the Boyce Thompson Institute for Plant Research, Inc.*

**Biological Activity**

Determined by its ability to inhibit the M IL-4-dependent proliferation of M HT-2 cells. The **ED<sub>50</sub>** was found to be  $\leq 0.2$  ng/ml, corresponding to a specific activity of  $\geq 5 \times 10^6$  units/mg.

**Authenticity**

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

**Endotoxin**

Endotoxin level is  $<0.1$  ng/  $\mu$ g of protein ( $<1$ EU/  $\mu$ g).

**Protein Content**

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

**Storage**

-20°C

**Precautions**

Recombinant Human TGF- $\beta$ 2 (insect derived) is for research use only and not for use in diagnostic or therapeutic procedures.

**Recombinant Human TGF- $\beta$ 2 (insect 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 Cytometry](#)
- [Cell Culture](#)

**Recombinant Human TGF- $\beta$ 2 (insect derived) - Images**