## **Product Sheet**

## TGF-β1, human recombinant

## Catalog # TGFB1-005; TGFB1-025; TGFB1-100

- **Description** Members of TGF- $\beta$  family are multifunctional cytokines that regulate cell proliferation, growth, differentiation and migration as well as synthesis of the extracellular matrix. The three human isoforms, TGF- $\beta$ 1,  $\beta$ 2,  $\beta$ 3, signal through the same receptor and elicit similar biological responses. The release of biologically active TGF- $\beta$  isoform from a latent complex involves proteolytic processing of the complex. TGF- $\beta$ 1 is the most abundant isoform secreted by almost all cell types. Human TGF- $\beta$ 1 is a 25.0kDa protein with each subunit containing 112 amino acid residues, linked by a disulfide bond.
- Formulation Lyophilized in sterile filtered solution of acetonitrile/TFA and PBS
- **Reconstitution** Before reconstitution, we recommend a brief spin to drive down any material dislodged from the bottom of the tube. The lyophilized protein should be reconstituted in 5 mM HCl. Further dilutions should be made in buffer or medium containing carrier proteins, such as albumin or serum.
  - **Stability** The lyophilized protein is stable for at least 1 year if stored at -80 degree C. Reconstituted protein is stable for at least 1 month at 4 degree C, but should be stored in aliquots at -80 degree C for longer term. Avoid repeated freeze and thaw.
    - **Purity** Greater than 95% as determined by SDS-PAGE and HPLC analyses
- **Biological Activity** The activity was determined by using a SMAD reporter gene assay in human 293 cells. The EC50 ranges from 0.1 1.0 ng/ml.

**Country of Origin** USA

For Research Use Only. Not for Use in Humans.

