

**Recombinant Human Transforming Growth Factor- $\beta$ 1**

Catalog Number: SJA11

Strength: 10 $\mu$ g**Specifications and Use**

|                            |  |
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| <b>Description</b>         | <ul style="list-style-type: none"><li>● Recombinant human TGF-<math>\beta</math>1 is a disulfide-linked homodimer, polypeptide chain containing 224 amino acids.</li></ul>   |
| <b>Source</b>              | <ul style="list-style-type: none"><li>● CHO/dhfr-</li></ul>  |
| <b>Molecular Mass</b>      | <ul style="list-style-type: none"><li>● 25.0 kD</li></ul>  |
| <b>Purity</b>              | <ul style="list-style-type: none"><li>● <math>\geq 97\%</math>.</li></ul>  |
| <b>Endotoxin Level</b>     | <ul style="list-style-type: none"><li>● &lt;1.0 EU/<math>\mu</math>g, determined by the LAL method.</li></ul>  |
| <b>Biological Activity</b> | <ul style="list-style-type: none"><li>● <math>\geq 3.2 \times 10^7</math> RU/mg, determined by MV-1-Lu (NBL-7) cell growth inhibition assay.</li></ul>   |
| <b>Formulation</b>         | <ul style="list-style-type: none"><li>● Lyophilized from a 0.2<math>\mu</math>m filtered solution in 100 mM Glycine, 150 mM NaCl, pH 4.0.</li></ul>  |
| <b>Reconstitution</b>      | <ul style="list-style-type: none"><li>● It is recommended to reconstitute the lyophilized rHuTGF-<math>\beta</math>1 in 0.2ml sterile water.</li></ul>   |
| <b>Storage</b>             | <ul style="list-style-type: none"><li>● Lyophilized samples are stable for 36 months from date of manufacture at -20<math>^{\circ}</math>C to -70<math>^{\circ}</math>C.</li><li>● Upon reconstitution, this cytokine can be stored under sterile conditions at 2- 8<math>^{\circ}</math>C for one month or at -20<math>^{\circ}</math>C to -70<math>^{\circ}</math>C <b>in a manual defrost freezer</b> for three months without detectable loss of activity.</li><li>● <b>Avoid repeated freeze-thaw cycles.</b></li></ul> |

**Human Transforming Growth Factor- $\beta$ 1**

The TGF- $\beta$ 1 protein is a member of TGF- $\beta$  family. TGF- $\beta$ s are multifunctional set peptides that control proliferation, differentiation, and other functions in many cell types. TGF- $\beta$ s act synergistically with TGFA in inducing transformation. It also acts as a negative autocrine growth factor. TGF- $\beta$ 1 plays an important role in controlling the immune system, and shows different activities on different types of cell, or cells at different developmental stages. Most immune cells (or leukocytes) secrete TGF- $\beta$ 1.

FOR RESEARCH USE ONLY. NOT FOR HUMAN USE.