



3050 Spruce Street  
Saint Louis, Missouri 63103 USA  
Telephone 800-325-5832 • (314) 771-5765  
Fax (314) 286-7828  
email: techserv@siaI.com  
sigma-aldrich.com

## Product Information

**Transforming Growth Factor- $\beta$ 1  
Soluble Receptor II  
Human, Recombinant**  
Expressed in NSO myeloma cells

Product Number **T 3301**

### Product Description

The mammalian homodimeric isoforms TGF- $\beta$ 1, TGF- $\beta$ 2, and TGF- $\beta$ 3 bind with high affinity to a set of cell surface proteins that include the type I receptor, the type II receptor, and betaglycan.<sup>1</sup> The type II receptor has a molecular weight of 70 kDa. The Recombinant, Human TGF- $\beta$ 1 Soluble Receptor II is produced by a DNA sequence encoding the 159 amino acid residue extracellular domain of human TGF- $\beta$ 1 receptor type II.<sup>2</sup> Recombinant, Human TGF- $\beta$ 1 Soluble Receptor II contains 136 amino acid residues and is generated after cleavage of the 23 amino acid signal peptide. Recombinant, Human TGF- $\beta$ 1 Soluble Receptor II will bind to TGF- $\beta$ 1, - $\beta$ 2, - $\beta$ 3, and - $\beta$ 5.

### Reagents

Lyophilized from a 0.2  $\mu$ m-filtered solution of phosphate buffered saline, pH 7.4 containing 1.25 mg bovine serum albumin (BSA) as a carrier protein.

### Reconstitution

Reconstitute the contents of the vial using 0.2  $\mu$ m-filtered PBS containing 0.1% HSA or BSA to a concentration not less than 50  $\mu$ g/ml.

### Storage/Stability

Store at -20 °C for no more than 6 months.

After reconstitution, this cytokine may be stored at 2-8 °C for one month. For extended storage, freeze in working aliquots at -70 °C or -20 °C for three months. Repeated freezing and thawing is not recommended.

### Product Profile

The biological activity of Recombinant, Human TGF- $\beta$ 1 Soluble Receptor II is measured by its ability to inhibit the TGF- $\beta$ 1 activity on the mouse T cell line, HT-2.<sup>3</sup> The EC<sub>50</sub> is defined as the effective concentration of soluble receptor that elicits a 50% inhibition of TGF $\beta$ 1 activity in a cell based bioassay.

### References

1. Laiho, M., et al., Journal of Biol. Chem., **266**, 14, 9108 (1991).
  2. Lin, H., et al., Cell, **68**, 775 (1992).
  3. Tsang, M., et al., Lymphokine Res., **9**, 607 (1990).
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