

Recombinant Protein Technical Manual

Recombinant Human IL-6/Interleukin-6 Protein (Active) RPES1357

Product Data:

Product SKU: RPES1357 **Size:** 10μg

Species: Human Expression host: E. coli

Uniprot: P05231

Protein Information:

Molecular Mass: 20.9 kDa

AP Molecular Mass: 20 kDa

Tag:

Bio-activity: Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The

ED50 for this effect is 2000pg/ml.

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per μg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at $4-7^{\circ}$ C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application: Cell Culture

Synonyms: Interleukin-6; IL-6; B-Cell Stimulatory Factor 2; BSF-2; CTL Differentiation Factor;

CDF; Hybridoma Growth Factor; Interferon Beta-2; IFN-Beta-2; IL6;

IFNB2;BSF2;HGF;HSF;IFNB2

Immunogen Information:

Sequence: Val30-Met212

Background:

Cytokines of the IL6/GCSF/MGF family are glycoproteins of about 170 to 180 amino acid residues that contain four conserved cysteine residues involved in two disulfide bonds. They have a compact, globular fold (similar to other interleukins), stabilized by the 2 disulfide bonds. One half of the structure is dominated by a 4 alpha-helix bundle with a left-handed twist; the helices are anti-parallel, with 2 overhand connections, which fall into a 2-stranded anti-parallel beta-sheet. The fourth alpha helix is important to the biological activity of the molecule. Interleukin-6 (IL-6) is an important proinflammatory and immunoregulatory cytokine expressed by various cells. Interleukin-6 has been shown to inhibit the growth of early stage and to promote the proliferation of advanced stage melanoma cells in vitro.