Recombinant Protein Technical Manual

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

RPES1238

Product Data:

Product SKU: RPES1238

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: NP_000591.1

Protein Information:

Molecular Mass: 20.3 kDa

AP Molecular Mass: 20.3 kDa

Tag:

Bio-activity: 1. Measured by its binding ability in a functional ELISA. Immobilized recombinant human IL-6 at 8 µg/ml (100 µl/well) can bind recombinant human IL6R with a linear range of 1.25-20.0 ng/mL.2. Measured in a cell proliferation assay using TF human erythroleukemic cells. The ED50 for this effect is 0.75-3 ng/mL. The specific activity of Recombinant Human IL-6 is approximately 0.35 × 105 IU/µg.3. Measured by its binding ability in a functional ELISA. 2. Immobilized human IL6 at 10µg/mL (100µL/well) can bind human IL6R-His, the EC50 of human IL6R-His is 0.1-0.5 µg/mL.

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

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

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

Formulation: Lyophilized from sterile PBS, pH 7.4

1. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA.

2. Please contact us for any concerns or special

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

Application: Cell Culture, Functional ELISA

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: Val 30-Met 212

Background:

Interleukin-6 (IL-6) is a multifunctional α-helical cytokine that regulates cell growth and differentiation of various tissues, which is known particularly for its role in the immune response and acute phase reactions. IL-6 protein is secreted by a variety of cell types including T cells and macrophages as phosphorylated and variably glycosylated molecule. It exerts actions through the its heterodimeric receptor composed of IL-6R that lacks the tyrosine/kinase domain and binds IL-6 with low affinity, and ubiquitously expressed glycoprotein 130 (gp130) that binds the IL-6. IL-6R complex with high affinity and thus transduces signals. IL-6 is also involved in hematopoiesis, bone metabolism, and cancer progression, and has been defined an essential role in directing transition from innate to acquired immunity.