

Recombinant Human IL-6/Interleukin-6 Protein

Catalog Number: PKSH033611

Note: Centrifuge before opening to ensure complete recovery of vial contents.

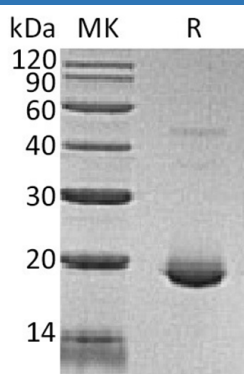
Description

| | |
|----------------------|--|
| Species | Human |
| Source | E.coli-derived Human IL-6/Interleukin-6 protein Val30-Met212, with an C-terminal His |
| Calculated MW | 21.8 kDa |
| Observed MW | 22 kDa |
| Accession | P05231 |
| Bio-activity | 1. Measure by its ability to induce proliferation in TF-1 cells. The ED ₅₀ for this effect is <0.5 ng/mL. The specific activity of recombinant human IL-6 is approximately >5 x 10 ⁸ IU/mg. 2. Measure by its ability to induce proliferation in MCF-7 cells. The ED ₅₀ for this effect is <4.4 ng/mL. |

Properties

| | |
|-----------------------|--|
| Purity | > 98 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 0.1 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, 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°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 sterile PBS, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 98 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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.