

## Recombinant Human IL-6/Interleukin-6 Protein

Catalog Number: PKSH033611

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

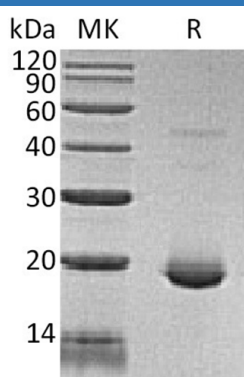
### Description

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

### Properties

|                       |   |
|-----------------------|---|
| <b>Purity</b>         | > 98 % as determined by reducing SDS-PAGE.  |
| <b>Endotoxin</b>      | < 0.1 EU per µg of the protein as determined by the LAL method.   |
| <b>Storage</b>        | 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. |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.   |
| <b>Formulation</b>    | Lyophilized from sterile PBS, pH 8.0.<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual.            |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.  |

### Data



> 98 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

Toll-free: 1-888-852-8623  
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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.

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