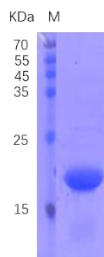




## Specification

|                                  |                                                                                                                                                                                                                                                                                               |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product name:</b>             | Recombinant human IL-6 antigen                                                                                                                                                                                                                                                                |
| <b>Source:</b>                   | <i>E.coli</i> derived                                                                                                                                                                                                                                                                         |
| <b>Accession #:</b>              | P05231                                                                                                                                                                                                                                                                                        |
| <b>SDS-PAGE:</b>                 | 15-25 kDa, reducing conditions                                                                                                                                                                                                                                                                |
| <b>Construction:</b>             | Pro29-Met212                                                                                                                                                                                                                                                                                  |
| <b>Predicted Molecular Mass:</b> | 20.9kDa                                                                                                                                                                                                                                                                                       |
| <b>Activity:</b>                 | <ol style="list-style-type: none"> <li>1. Measured in a cell proliferation assay using T1165.85.2.1 mouse plasmacytoma cells. The ED50 for this effect is 0.2-0.8 ng/mL.</li> <li>2. Immunoreactivity was confirmed by reacting with monoclonal antibodies specific to human IL-6.</li> </ol> |
| <b>Application:</b>              | ELISA, immunology, others unspecified.                                                                                                                                                                                                                                                        |
| <b>Form:</b>                     | Liquid                                                                                                                                                                                                                                                                                        |
| <b>Formulation:</b>              | 10 mM Tris, 150 mM NaCl, pH 8.0                                                                                                                                                                                                                                                               |
| <b>Stability &amp; Storage:</b>  | Stable at -80°C for at least 24 months                                                                                                                                                                                                                                                        |
| <b>Shipping condition:</b>       | The product is shipped on ice pack. Upon receiving, store it immediately at the recommended temperature.                                                                                                                                                                                      |
| <b>Conc. Determined:</b>         | BCA                                                                                                                                                                                                                                                                                           |
| <b>Purity:</b>                   | >98%                                                                                                                                                                                                                                                                                          |

## SDS-PAGE



Greater than 98% as determined by reducing SDS-PAGE. (QC verified).



## BACKGROUND

Cytokines of the IL6/GCSF/MGF family are glycoproteins composed of approximately 170-180 amino acid residues, and contain four conserved cysteine residues that form two disulfide bonds. These proteins adopt a compact, globular fold similar to other interleukins, with the disulfide bonds providing structural stability. The core structure consists of a four- $\alpha$ -helix bundle with a left-handed twist; the helices are arranged in an anti-parallel fashion, connected by two overhand loops that form a two-stranded anti-parallel  $\beta$ -sheet. The fourth  $\alpha$ -helix plays a critical role in the biological activity of the molecule. Interleukin-6 (IL-6) is a key proinflammatory and immunoregulatory cytokine produced by various cell types, including macrophages, T cells, and endothelial cells. It plays diverse roles in immune responses, inflammation, hematopoiesis, and oncogenesis.

### References:

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7. Kestler, D.P. et al. (1995) Blood 86:4559.