Recombinant Human IL-6/Interleukin-6 Protein

Catalog Number: PKSH033611

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

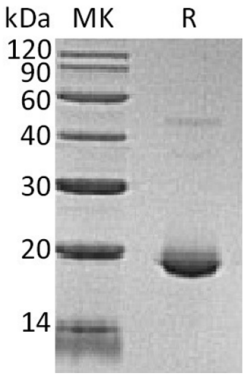
Description

Species	Human
Mol_Mass	21.8 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 ℃. 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 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

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 bet a-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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