

Product Information

Catalog Number	KD-004
Species	Human
Protein Construction	IL-6 (Val30-Met212), Accession # P05231.1
Tag	No tag
Expression System	HEK 293
Purity	> 95% as determined by SDS-PAGE
Predicted Molecular Mass	21 kDa
SDS-PAGE	22-25 kDa, under reducing conditions
Endotoxin	<0.1 EU/μg of the protein by the LAL method
Biological Activity	Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 0.5-1.5 ng/mL.
Formulation	Lyophilized from a 0.22μm filtered solution in PBS
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder at 100 μg/mL in sterile deionized water
Storage & Stability	Use a manual defrost freezer and avoid repeated freeze-thaw cycles 12 months from date of receipt, at lower than -70 °C as supplied 1 week, 2 to 8 °C under sterile conditions after reconstitution 1 month, -20 to -70 °C under sterile conditions after reconstitution
Usage	Research use only

Product Data

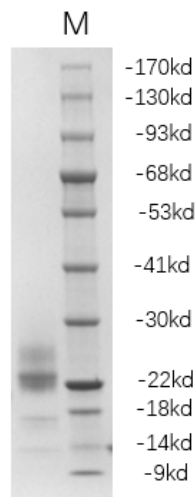


Figure 1. SDS-PAGE analysis with 2 μ g recombinant human IL-6 per lane, under reducing conditions, showing bands at 22-25 kDa

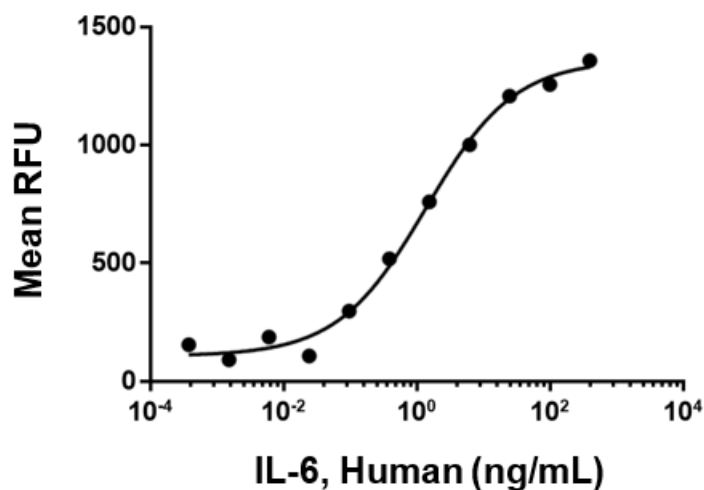


Figure 2. Biological activity measured in a cell proliferation assay using TF-1 cells, ED50 for this effect is 0.5-1.5 ng/mL

Background

Interleukin-6 (IL-6), also known as BSF-2, CDF and IFNB2, is a pleiotropic cytokine that acts in both pro-inflammatory and anti-inflammatory responses. It is produced mainly by T cells, macrophages, monocytes, endothelial cells and muscle cells. IL-6 binds to IL-6 receptor (IL-6R) to trigger the association of IL-6R with gp130, inducing signal transduction through JAKs and STATs. The biological functions of IL-6 are diverse. It stimulates B cell differentiation and antibody production, myeloma and plasmacytoma growth, as well as nerve cell differentiation. It also acts as a myokine, produced by muscle cells in response to muscle contraction, to be released to the blood stream to help break down fats and improve insulin resistance.