

Rev03
Update: Dec,14,2021

DATASHEET

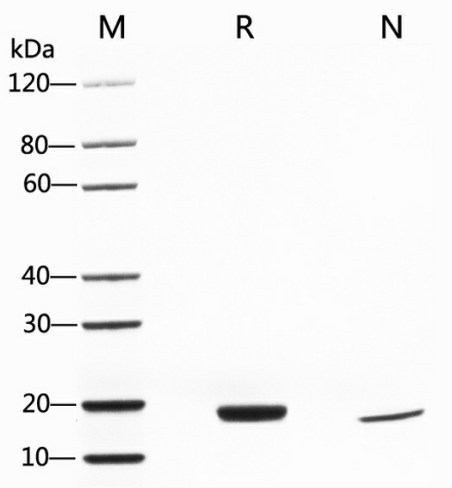
IL-6, Human

Cat. No.: Z03034

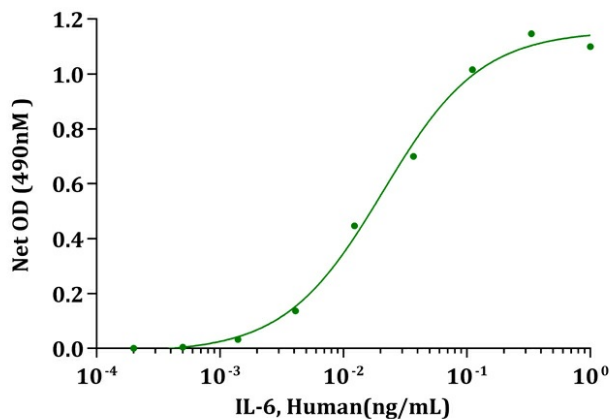
Product Introduction

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| Species | Human |
| Protein Construction | Expressed with an N-terminal Met. IL-6 (Pro29-Met212) Accession # Q75MH2 |
| Purity | > 95% as analyzed by SDS-PAGE |
| Endotoxin Level | < 0.2 EU/ μ g of protein by gel clotting method |
| Biological Activity | ED ₅₀ < 1.0 ng/ml, measured in a cell proliferation assay using TF-1 cells, corresponding to a specific activity of > 1.0 \times 10 ⁶ units/mg. |
| Expression System | E. coli |
| Apparent Molecular Weight | ~20.9 kDa, on SDS-PAGE under reducing conditions. |
| Formulation | Lyophilized after extensive dialysis against 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 in ddH ₂ O up to 100 μ g/ml. |
| Storage & Stability | Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles. |

Examples



2 μ g of IL-6, Human (Cat. No. Z03034) was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining



Biological Activity

IL-6, Human (Cat. No. Z03034) stimulates cell proliferation of 7TD1 cells. The ED₅₀ for this effect is less than 0.1ng/mL.

Background

Target Background : Interleukin-6 (IL-6), also known as BSF-2, CDF and IFNB2, is a pleiotropic cytokine that participates 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, and nerve cell differentiation. It also acts as a myokine, produced by muscle cells in response to muscle contraction and released into the blood stream to help break down fats and improve insulin resistance.

Synonyms : IL6; 26 kDa protein; IFN- β 2; IFN-b2; B cell differentiation factor; BCDF; BSF-2; HPGF; HSF; MGI-2

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.