Rev03
Update: Dec,14,2021

DATASHEET

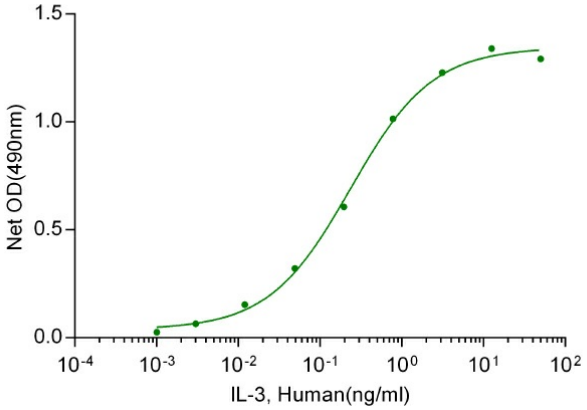
IL-3, Human

Cat. No.: Z03156

Product Introduction

Species	Human
Protein Construction	Expressed with an N-terminal Met. **IL-3 (Asp20-Phe152) Accession # P08700**
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	ED_{50} < 0.5 ng/ml, measured by a cell proliferation assay using TF-1 cells, corresponding to a specific activity of > 2.0×10^7 units/mg.
Expression System	E. coli
Apparent Molecular Weight	~15.2 kDa, on SDS-PAGE under non-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_2O up to 100 μg/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



ED_{50}< 0.5 ng/mL, measured by a cell proliferation assay using TF-1 cells, corresponding to a specific activity of > 2×10^7 units/mg.

Background

Target Background : Interleukin-3 (IL-3) is a pleiotropic cytokine belonging to the interleukin family. IL-3 shares similarities with Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF) and IL-5: they all have a four-helix bundle structure, are located on the same chromosomes in both human and mouse, are produced by activated T cells, and share receptors. The IL-3/IL-5/GM-CSF receptor family members are all heterodimeric, composed of a receptor-specific α chain and a common β chain. IL-3 is also called multi-colony stimulating factor since it stimulates the development and colony formation of multiple lineages of hematopoietic cells by activating intracellular pathways such as Ras-Raf-ERK and JAK/STAT. IL-3 inhibits apoptosis and promotes cell survival by targeting the anti-apoptotic bcl-2 gene family.

Synonyms : IL3; interleukin 3; IL-3; MCGF; MULTI-CSF; Mast cell growth factor; P-cell stimulation factor; HCGF

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