

Rev03
Update: Dec,14,2021

DATASHEET

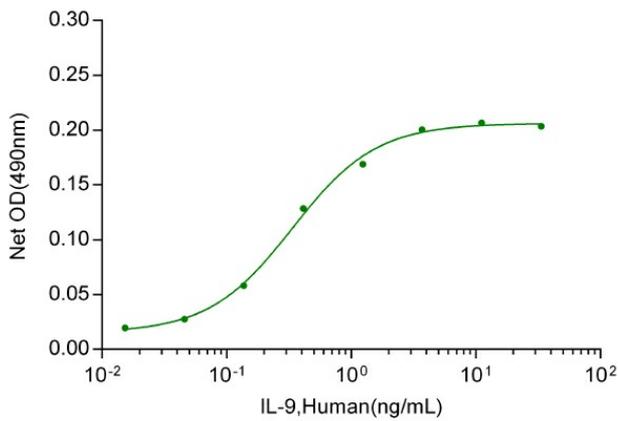
IL-9, Human

Cat. No.: Z03013

Product Introduction

Species	Human
Protein Construction	IL-9 (Gln19-Ile144) Accession # P15248
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 < 1.0 ng/ml, measured in a cell proliferation assay using MO7e cells, corresponding to a specific activity of > 1.0 × 10 ⁶ units/mg.
Expression System	CHO
Apparent Molecular Weight	25~40 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 ₂ O or PBS 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



ED₅₀ < 1 ng/ml, measured in a cell proliferation assay using MO7e cells, corresponding to a specific activity of > 1 × 10⁶ units/mg.

Background

Target Background : Interleukin 9, also known as IL9, is a cytokine (cell signalling molecule) belonging to the group of interleukins. The protein encoded by this gene is a cytokine produced by T-cells and specifically by CD4⁺ helper cells that acts as a regulator of a variety of hematopoietic cells. This cytokine stimulates cell proliferation and prevents apoptosis. It functions through the interleukin-9 receptor (IL9R), which activates different signal transducer and activator (STAT) proteins and thus connects this cytokine to various biological processes. The gene encoding this cytokine has been identified as a candidate gene for asthma. Genetic studies on a mouse model of asthma demonstrated that this cytokine is a determining factor in the pathogenesis of bronchial hyperresponsiveness.

Synonyms : IL9; p40 cytokine; T-cell growth factor p40; interleukin-9

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