

DATASHEET
Version 20181206**IL-9, Human****Cat. No.:** Z03013-1**Size:** 1.0 mg**Synonyms:** p40 cytokine, T-cell growth factor p40**Description:**

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.

Amino Acid Sequence:

00001 QGCPTLAGIL DINFLINKMQ EDPASKCHCS ANVTSCLCGLG
00041 IPSDNCTRPC FSERLSQMTN TTMQTRYPLI FSRVKKSVEV
00081 LKNNKCPYFS CEQPCNQTTA GNALTFLKSL LEIFQKEKMR
00121 GMRGKI

Source: CHO**Species:** Human**Biological Activity:** ED₅₀ < 1 ng/ml, measured in a cell proliferation assay using MO7e cells, corresponding to a specific activity of > 1×10⁶ units/mg.**Molecular Weight:** 25-40 kDa, observed by non-reducing SDS-PAGE.**Formulation:** Lyophilized after extensive dialysis against PBS.**Reconstitution:** Reconstituted in ddH₂O or PBS at 100 µg/ml.**Purity:** > 95% as analyzed by SDS-PAGE and HPLC.**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.**Storage:** Lyophilized recombinant human Interleukin 9 (IL-9) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhIL-9 should be stable up to 1 week at 4°C or up to 2 months at -20°C.