

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant IL-9, Human

Catalog Number: BK0259-1mg

Source: CHO

Quantity: 1mg

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.

Molecular Weight:

25-40 kDa, observed by non-reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE and HPLC.

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.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) pow-

der.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

QGCPTLAGILDINFLINKMQEDPASK-
CHCSANVTSCCLGLIPSDNCTRPCF-
SERLSQMTNTTMQTRYPLIFSRVKKSVEVLK-
NNKCPYF-
SCEQPCNQTTAGNALTFLKSLLEIFQKEKMRG-
MRGKI

Endotoxin:

< 0.2 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μg/ml.

Storage:

Lyophilized recombinant human Interleukin 9 (IL-9) remains stable up to 6 months at -80 °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.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.