

Recombinant Human IL-9 protein(His Tag)

Catalog Number: PKSH034101

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Species	Human
Source	E.coli-derived Human IL-9 protein Gln 19-Ile 144, with an N-terminal His
Calculated MW	14.9 kDa
Observed MW	19 kDa
Accession	P15248
Bio-activity	Measure by its ability to induce proliferation in MO7e cells. The ED ₅₀ for this effect is <0.25 ng/mL. The specific activity of recombinant human IL-9 is approximately >5 x10 ⁶ IU/ mg.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.01 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS,pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

Interleukin-9 (IL-9) is a secreted protein that belongs to the IL-7/IL-9 family. Mature mouse IL-9 shares 57% and 74% amino acid sequence identity with human and rat IL-9, respectively. IL-9 supports IL-2 independent and IL-4 independent growth of helper T-cells. IL-9 stimulates cell proliferation and prevents apoptosis. It functions through the IL-9 receptor (IL-9R), which activates different signal transducer and activator (STAT) proteins and thus connects this cytokine to various biological processes. IL-9 has been identified as a candidate gene for asthma. IL-9 is a determining factor in the pathogenesis of bronchial hyperresponsiveness.

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