

HUMAN IL5 PROTEIN, HFC TAG

Cat.#: 11337

Product Name: Human IL5 Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: IL-5;TRF;Interleukin-5;EDF

Target: IL5

UNIPROT ID: P05113

Description: Recombinant Human IL5 protein with C-terminal human Fc tag

Background: This gene encodes a cytokine that acts as a growth and differentiation factor for both B cells and eosinophils. The encoded cytokine plays a major role in the regulation of eosinophil formation, maturation, recruitment and survival. The increased production of this cytokine may be related to pathogenesis of eosinophil-dependent inflammatory diseases. This cytokine functions by binding to its receptor, which is a heterodimer, whose beta subunit is shared with the receptors for interleukine 3 (IL3) and colony stimulating factor 2 (CSF2/GM-CSF). This gene is located on chromosome 5 within a cytokine gene cluster which includes interleukin 4 (IL4), interleukin 13 (IL13), and CSF2. This gene, IL4, and IL13 may be regulated coordinately by long-range regulatory elements spread over 120 kilobases on chromosome 5q31.

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 39.3 kDa after removal of the signal peptide. The apparent molecular mass of IL5-hFc is approximately 35-55 kDa due to glycosylation.

Molecular Characterization: IL5(Ile20-Ser134) hFc(Glu99-Ala330)

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

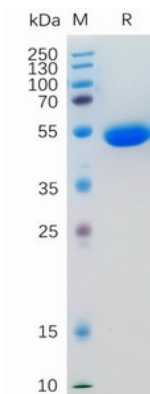


Figure 1. Human IL5 Protein, hFc Tag on SDS-PAGE under reducing condition.

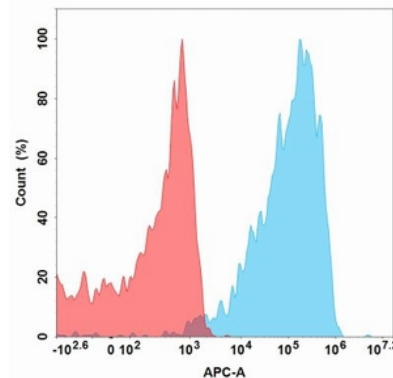


Figure 2. Flow cytometry analysis with 15 $\mu\text{g}/\text{ml}$ Human IL5 Protein, hFc Tag (11337) on Expi293 cells transfected with Human IL5RA protein (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).

Human IL5, hFc Tagged protein ELISA

0.2 μg of Human IL5, hFc tagged protein per well

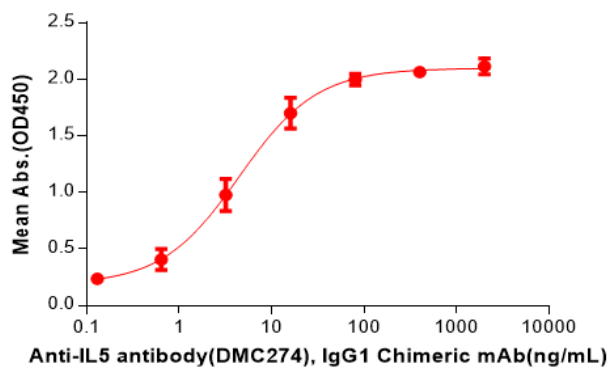


Figure 3. ELISA plate pre-coated by 2 $\mu\text{g}/\text{ml}$ (100 $\mu\text{l}/\text{well}$) Human IL5 Protein, hFc Tag(11337) can bind Anti-IL5 antibody(DMC274), IgG1 Chimeric mAb in a linear range of 0.64-16 ng/mL.