

HUMAN IL5 PROTEIN, HIS TAG

Cat.#: 11205

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 6xHis 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 13.94 kDa after removal of the signal peptide. The apparent molecular mass of IL5-His is approximately 15-25 kDa due to glycosylation.

Molecular Characterization: IL5(Ile20-Ser134) 6×His tag

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.

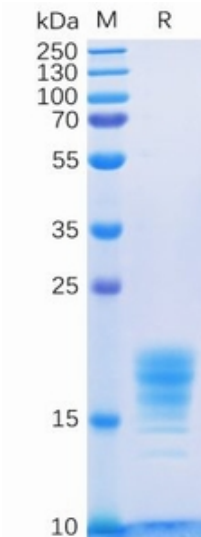


Figure 1. Human IL5 Protein, His Tag on SDS-PAGE under reducing condition.

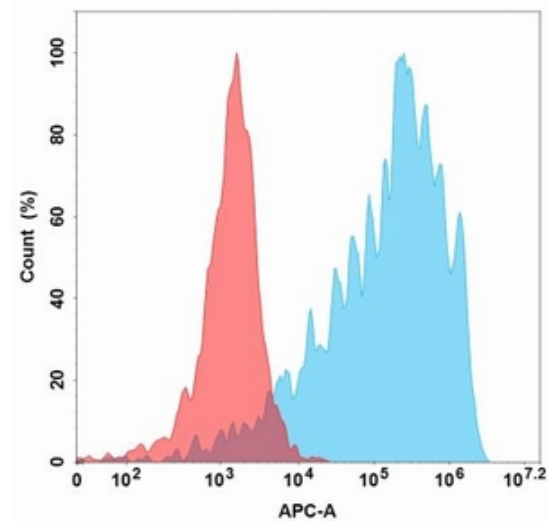


Figure 2. Flow cytometry analysis with 1 $\mu\text{g}/\text{ml}$ Human IL5 Protein, His Tag (11205) on Expi293 cells transfected with Human IL5RA protein (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).

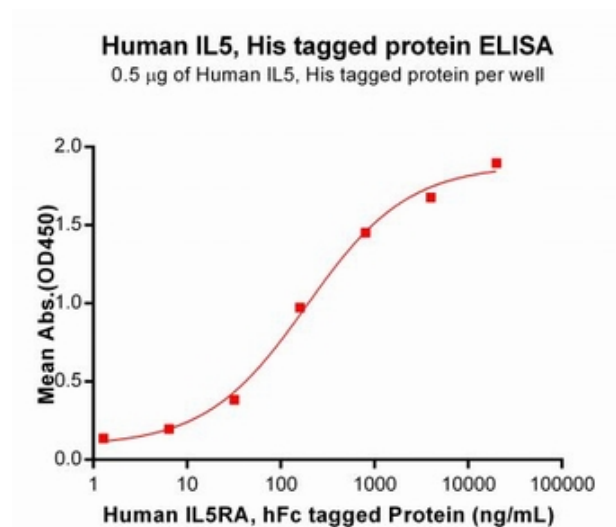


Figure 3. ELISA plate pre-coated by 5 $\mu\text{g}/\text{ml}$ (100 $\mu\text{l}/\text{well}$) Human IL5 protein, His Tag (11205) can bind Human IL5RA Protein, hFc Tag 11336 in a linear range of 6.4-4000 ng/mL.