

HUMAN IL23A AND IL12B HETERODIMER PROTEIN**Cat.#:** 12251**Product Name:** Human IL23A And IL12B Heterodimer Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** IL-23;IL-23A;IL23P19;P19;SGRF and CLMF;CLMF2;IL-12B;IMD28;IMD29;NKSF;NKSF2**Target:** IL23A and IL12B**UNIPROT ID:** Q9NPF7;P29460**Description:** Recombinant human IL23A protein with C-terminal human Fc tag and human IL12B protein with C-terminal 6xHis tag**Background:** Interleukin-23 subunit alpha (IL-23 alpha) can associate with IL12B to form the IL-23 interleukin, a heterodimeric cytokine which functions in innate and adaptive immunity. IL-23 may constitute with IL-17 an acute response to infection in peripheral tissues. IL-23 binds to a heterodimeric receptor complex composed of IL12RB1 and IL23R, activates the Jak-Stat signaling cascade, stimulates memory rather than naive T-cells and promotes production of proinflammatory cytokines. IL-23 induces autoimmune inflammation and thus may be responsible for autoimmune inflammatory diseases and may be important for tumorigenesis.**Species/Host:** HEK293**Molecular Weight:** The protein has a predicted molecular mass of 44.8 and 35.5 kDa after removal of the signal peptide. The apparent molecular mass of IL23A-hFc and IL12B-His is approximately 35-55 kDa due to glycosylation.**Molecular Characterization:** IL23A(Arg20-Pro189) hFc(Glu99-Ala330) and IL12B(Ile23-Ser328) 6xHis 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 IL23A & IL12B Heterodimer Protein, hFc Tag & His Tag on SDS-PAGE under reducing condition.