

## HUMAN IL12A AND IL12B HETERODIMER PROTEIN, HFC TAG AND HIS TAG

**Cat.#:** 11923

**Product Name:** Human IL12A And IL12B Heterodimer Protein; HFc Tag And His Tag

**Size:** 10 µg; 50 µg and 100 µg

**Synonyms:** CLMF;IL-12A;NFSK;NKSF1;P35 and CLMF;CLMF2;IL-12B;IMD28;IMD29;NKSF;NKSF2

**Target:** IL12A andamp;IL12B

**UNIPROT ID:** P29459;P29460

**Description:** Recombinant Human IL12A Protein With C-Terminal Human Fc Tag And Human IL12B Protein With C-Terminal 6×His Tag

**Background:** Interleukin 12 (IL12) is also known as p70, and is an interleukin that is naturally produced by dendritic cells, macrophages and human B-lymphoblastoid cells (NC-37) in response to antigenic stimulation.IL12 is a heterodimeric cytokine, containing IL-12A (p35) and IL-12B (p40). IL-12 is involved in the differentiation of naive T cells into Th1 cells. It is known as a T cell-stimulating factor, which can stimulate the growth and function of T cells. It stimulates the production of IFN-γ and TNF-α from T cells and NK cells, and reduces IL-4 mediated suppression of IFN-γ. IL-12 plays an important role in the activities of natural killer cells and T lymphocytes. IL-12 also has anti-angiogenic activity, which means it can block the formation of new blood vessels.

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 48.7 and 35.5 kDa after removal of the signal peptide.

**Molecular Characterization:** IL12A(Arg23-Ser219) hFc(Glu99-Ala330)and IL12B(Ile23-Ser328) 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-HC, 150 mM NaC, 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 IL12A & IL12B Heterodimer Protein, hFc Tag & His Tag on SDS-PAGE under reducing condition.