

## 32-20618: Recombinant Human IL-12 p70 (CHO derived)(Discontinued)

**Reactivity :** Human, Monkey, Mouse

**Alternative Name :** Interleukin-12, NKSF, CTL Maturation Factor (TCMF), Cytotoxic Lymphocyte Maturation Factor (CLMF), TSF p35: Interleukin-12 subunit alpha, IL-12 subunit p35, IL-12A, Cytotoxic Lymphocyte Maturation Factor 35 kDa subunit (CLMF p35), NK cell Stimulating Factor Chain 1 p40: Interleukin-12 subunit beta, IL-12 subunit p40, IL-12B, Cytotoxic Lymphocyte Maturation Factor 40 kDa subunit (CLMF p40), NK cell Stimulating Factor Chain 2

### Description

#### Source:CHO cells

IL-12 is a potent regulator of cell-mediated immune responses and it induces IFN-Gamma production by NK and T cells. It is produced by activated monocytes/macrophage cells, B lymphocytes and connective tissue-type mast cells. Among its biological activities, IL-12 promotes the growth and activity of activated NK, CD4+ and CD8+ cells, and induces the development of IFN-Gamma-producing Th1 cells. Recombinant Human IL-12 is a 75.0 kDa heterodimeric glycoprotein consisting of disulfide-linked 35 kDa (p35) and 40 kDa (p40) subunits (503 total amino acid residues).

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Purity: >= 98% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** p35 Subunit: RNLPVATPDP GMFPCLHHSQ NLLRAVSNML QKARQTLEFY PCTSEEIDHE DITKDKTSTV EACLPLELTK NESCLNSRET SFITNGSCLA SRKTSFMMAL CLSSIIYEDLK MYQVEFKTMN AKLLMDPKRQ IFLDQNMLAV IDELMQALNF NSETVPQKSS LEEPDFYKTK IKLCILLHAF RIRAVTIDRV MSYLNAS p40 Subunit: IWELKK DVYVVVELDWY PDAPGEMVVL TCDDPEEDGI TWTLDQSSEV LGSGKTLTIQ VKEFGDAGQY TCHKGGEVLS HSLLLLHKKE DGIWSTDILK DQKEPKNKTF LRCEAKNYSG RFTCWWLTTI STDLTFSVKV SRGSSDPQGV TCGAATLSAE RVRGDNKEYE YSVECQEDSA CPAAEESLPI EVMVDAVHKL KYENYTSSFF IRDIIKPDPP KNLQLKPLKN SRQVEVSWEY PDTWSTPHSY FSLTFCVQVQ GKSKREKKDR VFTDKTSATV ICRKNASISV RAQDRYSSS WSEWASVPCS

### Application Note

Assay #1: Determined by its ability to induce IFN-Gamma production from Nk cells co-stimulated with IL-18. The expected ED<sub>50</sub> is <=1.0 ng/ml, corresponding to a specific activity of >= 1 x 10<sup>6</sup> units/mg. Assay #2: Determined by its ability to increase IFN-Gamma production by anti-TCR mAb-stimulated PBMCs. The expected ED50 for this effect is 4.0-8.0 ng/ml.