

32-6446: IL12 Human, CHO

Application : Functional Assay
Alternative Name : 23-219aa (IL12A) / 23-328aa (IL12B), Interleukin 12 (subunit beta/alpha), IL12 His, NKSF1, NKSF, CTL maturation factor (TCMF), Cytotoxic lymphocyte maturation factor (CLMF), TSF, Edodekin-alpha, IL-12.

Description

Source: CHO Cells.
Sterile Filtered White lyophilized (freeze-dried) powder.
interleukin 12 subunit beta/alpha or IL12b/IL12a is a growth factor cytokine which increases the lytic activity of NK/lymphokine-activated killer cells, activated T and NK cells and prompt IFN-gamma production (through resting PBMC). IL12b/IL12a is an essential part to the process of cellular-immunity and activates the differentiation of Th1 cells originates from the precursor T helper cells. The protein is linked to IL23A and creates the IL-23 interleukin, by that, the autoimmune inflammation is induced and autoimmune inflammatory diseases and tumorigenesis are being affected.
Interleukin 12 Human Recombinant is a glycosylated heterodimer containing 503 amino acids (306 amino acid rHuIL-12 p40 and the 197 amino acid rHuIL-12 p35 subunits) and having a molecular mass of 60kDa. IL12 is purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg
Purification : Greater than 97.0% as determined by analysis by SDS-PAGE.
Content : Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.2.
It is recommended to reconstitute the lyophilized Interleukin 12 in sterile 18M Omega -cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Storage condition : Lyophilized Interleukin 12 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PDGF BB should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.
Amino Acid : IL-12 is a heterodimer of IL-12A and IL-12B linked through a disulfide-bond: >IL-12 ARNLPVATP DPGMFPCLLH SQNLLRAVSN MLQKARQTL FYPCTSEEID HEDITKDKTS TVEACLPLEL TKNESCLNSR ETSFITNGSC LASRKTSFMM ALCLSSIED LKMYQVEFKT MNAKLLMDPK RQIFLDQNM L AVIDELMQAL NFNSETVPQK SSLEEPDFYK TKIKLCILLH AFRIRAVTID RVMSYLNAS. >IL-12B IWELKKDV YVVELDWYPD APGEMVVLTC DTPEEDGITW TLDQSSEVLG SGKTLTIQVK EFGDAGQYTC HKGGEVLSHS LLLLHKKEDG IWSTDILKDQ KEPKNKTLR CEAKNYSGRF TCWWLTIST DLTFSVKSSR GSSDPQGVTC GAATLSAERV RGDNKEYEYS VECQEDSACP AAEESLPIEV MVDVHKLKY ENYTSSFFIR DIKPDPPKN LQLKPLKNSR QVEVSWEYPD TWSTPHSYFS LTFCVQVQGK SKREKKDRVF TDKTSATVIC RKNASISVRA QDRYSSWS EWASVPCS.

Application Note

Determined by cell proliferation assay using PHA-stimulated human T lymphoblasts. The ED50 for this effect is 0.01-0.05 ng/mL corresponding to a specific activity of 1.1 × 10⁴ units/µg, which is calibrated against rHuIL-12 WHO Standard.