

Recombinant Human IL-12

Catalog # FL106

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 96% by SDS-PAGE or HPLC.
Endotoxin	< 0.01 EU/ μ g of rHuIL-12 protein as determined by LAL method.
Expression System	Expressed in CHO.
Species	Human
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as determined by its ability to induce IFN- γ production from NK cells co-stimulated with IL-18. The expected ED50 is \leq 1.0 ng/ml, corresponding to a specific activity of $\geq 1 \times 10^6$ units/mg.
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.
Accession #	P29459 HuIL-12 p35: Arg23-Ser219; HuIL-12 p40: Ile23-Ser328
Amino acid sequence	P35 Subunit: RNLPVATPDPGMFPCLHHSQNLRLAVSNMLQKARQTLEFYPTSEEIDHEDITKDKTSTVEACLPLELTKNESC LNSRETSFITNGSCLASRKTSFMMALCLSSIIYEDLKMYQVEFKTMNAKLLMDPKRQIFLDQNMLAVIDELMQALNFNSETV PQKSSLEEPDFYKTKIKLCILLHAFRIRAVTIDRVMSYLNAS P40 Subunit: IWELKKDVYVVELDWYPDAPGEMVVLTCDTPE EDGITWTLDSSEVLGSGKTLTIQVKEFGDAGQYTCHEGGEVLSHSLLLHKKEDGIWSTDILKDQKEPKNKTFLRCEAKNY SGRFTCWWLTTISTDLTFSVKSSRGSSDPQGVTCGAATLSAERVRGDNKEYEYSVEQEDSACPAAEESLPIEVMVDAVHKL KYENYTSFFIRDIIKPDPPKNLQLKPLKNSRQVEVSWEYPDTWSTPHSYFSLTFCVQVQGKSKREKKDRVFTDKTSATVICR KNASISVRAQDRYSSSWSEWASVPCS
Molecular weight	Approximately 75.0 kDa, consisting of disulfide-linked 35.0 kDa (p35) and 40.0 kDa (p40) subunits.
Synonyms	Interleukin-12, NKSF, CTL Maturation Factor (TCMF), Cytotoxic Lymphocyte Maturation Factor (CLMF), TSF
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored $\leq -20^\circ\text{C}$. Please avoid repeated freeze-thaw cycles after reconstitution. 36 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.
Precautions	Recombinant Human IL-12 is for research use only and not for use in diagnostic or therapeutic procedures.

Background

IL-12 is a potent regulator of cell-mediated immune responses and it induces IFN- γ 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- γ -producing Th1 cells. Recombinant Human IL-12 is a 75.0kDa heterodimeric glycoprotein consisting of disulfide-linked 35kDa (p35) and 40kDa (p40) subunits.

