



Product Datasheet

Product Name	Interleukin-12 Human Recombinant
Cata No	CB500264
Source	CHO (<i>Chinese Hamster Ovarian Cells</i>)
Synonyms	NKSF, CTL maturation factor (TCMF), Cytotoxic lymphocyte maturation factor (CLMF), TSF, Edodekin-alpha, IL-12.

Description

IL-12 is a heterodimeric cytokine that stimulates the production of interferon gamma from T-cells and natural killer cells, and also induces differentiation of Th1 helper cells. It is an initiator of cell-mediated immunity.

Interleukin-12 Human Recombinant produced in CHO is a glycosylated disulfide linked heterodimeric polypeptide containing 503 amino acids and having a molecular weight of 75 kDa comprised of disulfide-bonded 35 kDa (p35) and 40 kDa (p40) subunits.

The IL-12 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

The ED50 was determined by the stimulation of IFN-gamma production by NK-cells co-stimulated with IL-18 and was found to be < 1ng/ml, corresponding to a specific activity of >1 x 10⁶.

Purity

Greater than 95.5% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein (1mg/ml) was lyophilized with PBS pH-7.4 and 10% sucrose.

Stability

Lyophilized Interleukin12 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL12 should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

The sequence of the first five N-terminal amino acids was determined and found to be Arg-Asn-Leu-Pro-Val at the p35 subunit and Ile-Trp-Glu-Leu-Lys at the p40 subunit.