



## Product Datasheet

<b>Product Name</b>	Interleukin-12 Rat Recombinant
<b>Cata No</b>	CB500292
<b>Source</b>	<i>Baculovirus</i>
<b>Synonyms</b>	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 Rat Recombinant produced in Sf9 insect cells is a glycosylated disulfide linked heterodimeric polypeptide containing 503 amino acids and having a molecular weight of 70 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

ED<sub>50</sub> range = 0.01-0.05 ng/mL as determined by the dose dependent secretion of interferon-gamma from PHA and IL-2 activated mouse splenocytes that have been costimulated with PMA. Optimal

concentration for individual application should be determined by a dose response assay.

### Purity

Greater than 95.0% as determined by SDS-PAGE.

### Formulation

The protein (1mg/ml) was lyophilized with no additives.

### Stability

Lyophilized Interleukin-12 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-Val-Ile-Pro-Val at the p35 subunit and Met-Thr-Glu-Leu-Glu at the p40 subunit.

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