

## CHASELECTION

## Recombinant Mouse IL-12, Tag Free

货号(Catalog Number): CY150FXXXX(L)

**别名 (synonym):** IL12; IL-12; IL-12, subunit p35; IL12A; interleukin 12, p35; cytotoxic lymphocytematuration factor 1, p35)

**来源(Source):** Human embryonic kidney cell, HEK293-derived mouse IL-12 protein

**蛋白结构 (Structure):** 该蛋白不含标签

**基因 ID:** P43432 (p40) & P43431 (p35)

**氨基酸序列**

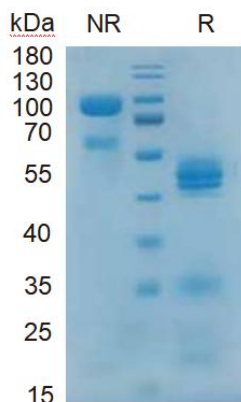
p40 (Met23-Ser335) & p35 (Arg23-Ala215)

**分子量大小(MW)**

59.9 KDa

**纯度 (Purity)**

> 95%, determined by SDS-PAGE

**SDS-PAGE**

4 ug/lane protein was resolved with SDS-PAGE under non-reducing (NR) and reducing (R) conditions and visualized by Coomassie Blue staining.

**制剂(Formulation)**

Solution protein.

Dissolved in sterile PBS buffer.

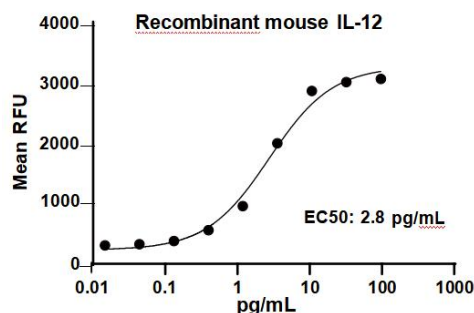
This solution can be diluted into other aqueous buffers.

Centrifuge the vial prior to opening.

版本号: IN-PA-61-00

**内毒素含量 (Endotoxin)**

<0.010 EU per 1 ug of the protein by the LAL method

**生物活性 (Bioactivity)**

Recombinant mouse IL-12 stimulates cell proliferation of the PHA-activated mouse splenocytes.

**储存与运输(Storage)**

Avoid repeated freeze-thaw cycles.

It is recommended that the protein be aliquoted for optimal storage.

36 months from date of receipt, -20 to -70 °C as supplied.

**产品背景介绍 (Production)**

Interleukin 12, also known as Natural Killer Cell Stimulatory Factor (NKSF) or Cytotoxic Lymphocyte Maturation Factor (CLMF), is a heterodimeric pleiotropic cytokine made up of a 40 kDa (p40) subunit and a 35 kDa (p35) subunit. IL-12 is produced by macrophages and B lymphocytes and has been shown to have multiple effects on T cells and Natural Killer (NK) cells. Some of these IL-12 activities include the induction of IFN- gamma and TNF in resting and activated T and NK cells; the enhancement of cytotoxic activity of resting NK and T cells, the stimulation of resting T cell proliferation in the presence of a comitogen; and the enhancement of NK cell proliferation. Current evidence indicates that IL-12 is a key mediator of cellular-immunity and induces the differentiation of Th1 cells from precursor T helper cells. Based on its activities, it has been suggested that IL-12 may have therapeutic potential as a vaccine adjuvant that promotes cellular-immunity and as an anti-tumor and anti-viral agent. Human and mouse IL-12 share 70% and 60% amino acid



sequence identity in their p40 and p35 subunits, respectively. While mouse IL-12 is active on both human and mouse cells, human IL-12 is not active on murine cells. IL-12 is a heterodimeric cytokine composed of a p35 and a p40 subunit. It is produced primarily by antigen-presenting cells (APCs) and exerts immunoregulatory effects on T and natural killer (NK) cells. Endogenous IL-12 appears to be a pre-requisite for generating optimal Th1 responses and plays a pivotal role in promoting cell-mediated immunity against intracellular pathogens.

