

# Recombinant Human Mouse IL-12

Catalog No: CM39

<b>Description</b>	Recombinant Mouse Interleukin-12 is produced by our Mammalian expression system and the target gene encoding Met23-Ser335&Arg23-Ala215 is expressed.
<b>Expression System</b>	Human cells
<b>Alternative name</b>	IL-12; Interleukin 12; Interleukin-12 subunit alpha;IL-12A;Cytotoxic lymphocyte maturation factor 35 kDa subunit;CLMF p35;IL-12 subunit p35;Interleukin-12 subunit beta; IL-12B; Cytotoxic lymphocyte maturation factor 40 kDa subunit; CLMF p40; IL-12 subunit p40;
<b>Accession No.</b>	P43432&P43431

<b>Quality Control</b>	Purity: greater than 95% as determined by reducing SDS-PAGE. Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4..
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
<b>Background</b>	Mouse IL-12 is a heterodimeric pleiotropic cytokine made up of a 40 kDa (p40) subunit and a 35 kDa (p35) subunit. 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. It is involved in the differentiation of naive T cells into Th1 cells. It is known as a T cell- stimulating factor, which can stimulate the growth and function of T cells. It stimulates the production of interferon-gamma (IFN-γ) and tumor necrosis factor-alpha (TNF-α) from T cells and natural killer (NK) cells, and reduces IL-4 mediated suppression of IFN- γ . T cells that produce IL-12 have a coreceptor, CD30, which is associated with IL-12 activity. IL-12 plays an important role in the activities of natural killer cells and T lymphocytes.IL-12 mediates enhancement of the cytotoxic activity of NK cells and CD8+ cytotoxic T lymphocytes.

## SDS-PAGE

