

Recombinant Human Mouse IL-12

Catalog No: CM39

Description	Recombinant Mouse Interleukin-12 is produced by our Mammalian expression system and the target gene encoding Met23-Ser335&Arg23-Ala215 is expressed.							
Expression System	Human cells							
Alternative name	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;							
Accession No.	P43432&P43431							
Quality Control	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.							
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4..							
Reconstitution	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.							
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.							
Storage	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.							
Background	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	<p>R NR MK kDa</p>  <table> <tr> <td>120</td> </tr> <tr> <td>90</td> </tr> <tr> <td>60</td> </tr> <tr> <td>40</td> </tr> <tr> <td>30</td> </tr> <tr> <td>20</td> </tr> <tr> <td>14</td> </tr> </table>	120	90	60	40	30	20	14
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