

## IL12a, IL12b

### Recombinant Murine Interleukin-12 p70

<b>Catalog No.</b>	CRI264B	<b>Quantity:</b>	10 µg
<b>Alternate Names:</b>	IL-12, IL-12a, IL-12b, p35, p40		
<b>Description:</b>	Interleukin 12 (IL-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. The IL-12 p40 subunit is shared by IL-23, another heterodimeric cytokine that has biological activities similar to, as well as distinct from, IL-12. IL-12 is produced by macrophages and B cells and has been shown to have multiple effects on T cells and natural killer (NK) cells. <b>While mouse IL-12 is active on both human and mouse cells, human IL-12 is not active on mouse cells.</b>		
<b>UniProt ID:</b>	P43431, P43432		
<b>Gene ID:</b>	16159, 16160		
<b>Source:</b>	CHO cells		
<b>Molecular Weight:</b>	75 kDa, heterodimer composed of 35 kDa and 40 kDa subunits (506 aa)		
<b>Formulation:</b>	Lyophilized from PBS		
<b>Purity:</b>	> 98% by SDS-PAGE and HPLC		
<b>Endotoxin Level:</b>	< 1.0 EU/µg		
<b>Biological Activity:</b>	<p><b>Assay #1:</b> ED50 &lt; 0.1 ng/ml, determined by the stimulation of IFN-gamma production by murine splenocytes co-stimulated with IL-18.</p> <p><b>Assay #2:</b> ED50 is ≤ 0.1 ng/ml, determined by its ability to stimulate the proliferation of 2D6 cells.</p>		
<b>Specific Activity:</b>	<p><b>Assay #1:</b> &gt; 1 x 10<sup>7</sup> units/mg</p> <p><b>Assay #2:</b> ≥ 1 x 10<sup>7</sup> units/mg</p>		
<b>Amino Acid Sequence:</b>	<p><b>p35 Subunit:</b> RVIPVSGPAR CLSQSRNLLK TTDDMVKTAR EKLKHYSTCA EDIDHEDITR DQTSTLKTCL PLELHKNESE LATRETSSTT RGSCLPQKT SLMRTLCLGS IYEDLKMYQT EFQAINAALQ NHHHQIILD KGMLVAIDEL MQLNHNGET LRQKPPVGEA DPYRVKMKLC ILLHAFSTRV VTINRVMGYL SSA</p> <p><b>p40 Subunit:</b> MWELEKDVYV VEVDWTPDAP GETVNLTCDT PEEDDITWTS DQRHGVIGSG KTLTITVKEF LDAGQYTCHK GGETLSHSHL LLHKKENGIW STEILKNFKN KTFLKCEAPN YSGRFTCSWL VQRNMDLKFN IKSSSSSPDS RAVTCGMASL SAEKVTLDQR DYKYSVSCQ EDVTCPTAEE TLPIELALEA RQQNKYENYS TSFFIRDIK PDPPKNLQMK PLKNSQVEVS WEYPDSWSTP HSYFSLKFFV RIQRKKEKMK ETEEGCNQKG AFLVEKTSTE VQCKGGNVCV QAQDRYYNSS CSKWACVPCR VRS</p>		

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protein to a concentration  $\geq 100 \mu\text{g/ml}$ . For extended storage, it is recommended to further dilute in a buffer containing a carrier protein such as 0.1% BSA and store in working aliquots at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$ .

**Storage & Stability:** Lyophilized protein is stable for 1 year at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$ . Store reconstituted protein in working aliquots at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$ . **Avoid repeated freeze-thaw cycles.**

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**



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