

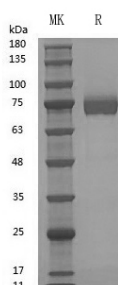
**Product Name: Recombinant Human IL-12**  
**Catalog #: PCH2522**



## Summary

<b>Name</b>	IL-12
<b>Purity</b>	Greater than 98% as determined by reducing SDS-PAGE
<b>Endotoxin level</b>	≤10 EU/mg
<b>Construction</b>	Recombinant Human IL-12 is produced by our Mammalian cell expression system and the target gene encoding Ile23-Ser328&Arg23-Ser219 is expressed.
<b>Accession #</b>	P29460(IL12P40), P29459(IL12P35)
<b>Host</b>	Human Cells
<b>Species</b>	Human
<b>Predicted Molecular Mass</b>	59 kDa
<b>Formulation</b>	Lyophilized From PBS,5% mannitol and 0.01% Tween 80, pH7.4
<b>Shipping</b>	The product is shipped on dry ice/polar packs.Upon receipt, store it immediately at the temperature listed below.
<b>Stability&amp;Storage</b>	Store at ≤-70°C, stable for 6 months after receipt.Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
<b>Reconstitution</b>	Always centrifuge tubes before opening.Do not mix by vortex or pipetting.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.Always centrifuge tubes before opening.Do not mix by vortex or pipetting.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.

## SDS-PAGE image



## Background

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**Alternative Names**

Interleukin-12 subunit alpha; IL-12A; Cytotoxic lymphocyte maturation factor 35 kDa subunit; CLMF p35; IL-12 subunit p35; NK cell; IL12A ; NKSF1 stimulatory factor chain 1

**Background**

Interleukin 12 (IL-12) is the founding member of the IL-12 family of heterodimeric cytokines, which have important immunological functions. IL-12 is composed of two disulfide-linked subunits of 35 kDa and 40 kDa, respectively. The 35 kDa subunit (p35) is an  $\alpha$ -helical protein homologous to IL-6 and GCSF. The 40 kDa subunit (p40) contains one fibronectin type III and one Ig C2-like domain, and has a high degree of structural homology to type I cytokine receptors. Whereas p35 subunit is unique to IL-12, the p40 subunit is also utilized in IL-23. Mature rat p35 is a 194 amino acids (aa) protein that is secreted as a heterodimer linked to p40. It contains three potential N-linked glycosylation sites and shares 86%, and 58% aa sequence identity with mouse and human p35, respectively. Mature rat p40 contains 313 aa and can exist in multiple forms, including monomer, homodimer, heterodimer linked to p19 (forming IL23), and heterodimer linked to p35 (forming IL-12). IL12 facilitates hematopoietic stem cell proliferation, induces NK cell proliferation, and potentiates the expansion and late activation of Th1 CD4+ T cells.

**Note**

For Research Use Only , Not for Diagnostic Use.