

Datasheet for ABIN2018013  
**IL12 Protein (AA 23-219, AA 23-328)**

## 3 Images

[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	IL12
Protein Characteristics:	AA 23-219, AA 23-328
Origin:	Human
Source:	HEK-293T Cells
Protein Type:	Recombinant
Biological Activity:	Active

## Product Details

Characteristics:	EC50 < 2 ng/mL, measured by the induction of IFN-gamma from NK cells co-stimulated with IL-18, corresponding to a specific activity of > 1x10 <sup>6</sup> units/mg. P35 subunit: AA 23-219 ,P40 subunit: AA 23-328
Purity:	> 95 % as analyzed by SDS-PAGE and HPLC.
Endotoxin Level:	< 0.2 EU/μg, determined by LAL method.

## Target Details

Target:	IL12
Alternative Name:	Interleukin 12(IL-12) ( <a href="#">IL12 Products</a> )
Background:	Interleukin 12 (IL-12), also known as natural killer cell stimulatory factor (NKSF) or cytotoxic lymphocyte maturation factor (CLMF), is a pleiotropic cytokine originally identified in the medium of activated human B lymphoblastoid cell lines. The p40 subunit of IL-12 has been

## Target Details

shown to have extensive amino acid sequence homology to the extracellular domain of the human IL-6 receptor while the p35 subunit shows distant but significant sequence similarity to IL-6, G-CSF, and chicken MGF. These observations have led to the suggestion that IL-12 might have evolved from a cytokine/soluble receptor complex. Human and mouse IL-12 share 70 % and 60 % amino acid sequence homology in their p40 and p35 subunits, respectively. IL-12 apparently shows species specificity with human IL-12 reportedly showing minimal activity in the mouse system.

Synonyms: NKSF, CTL maturation factor (TCMF), Cytotoxic lymphocyte maturation factor (CLMF), TSF

Molecular Weight: 75 kDa, consisting of a 306 amino acid residue p40 subunit and a 197 amino acid residue p35 subunit.

UniProt: [P29459](#), [P29460](#)

Pathways: [JAK-STAT Signaling](#), [TLR Signaling](#), [Cellular Response to Molecule of Bacterial Origin](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Activated T Cell Proliferation](#), [Cancer Immune Checkpoints](#), [Inflammasome](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

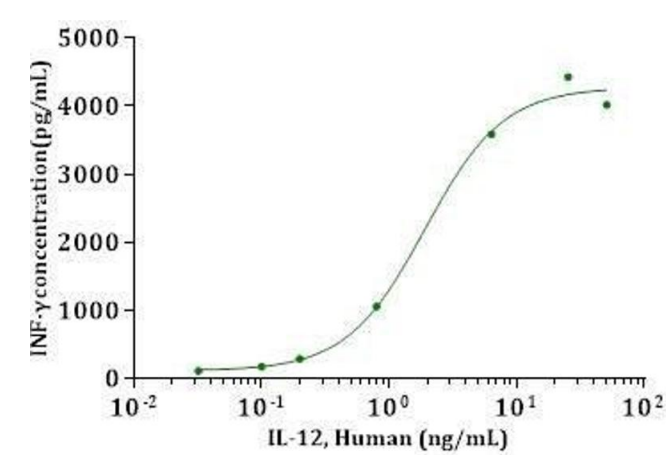
Reconstitution: Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/mL.

Buffer: Lyophilized after extensive dialysis against PBS.

Storage: -80 °C

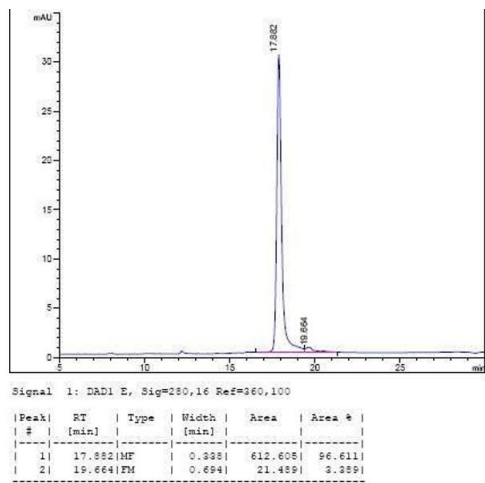
Storage Comment: Lyophilized recombinant Human Interleukin 12(IL-12) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rh-IL12 should be stable up to 1 week at 4 °C or up to 2 months at -20 °C.

Expiry Date: 6 months

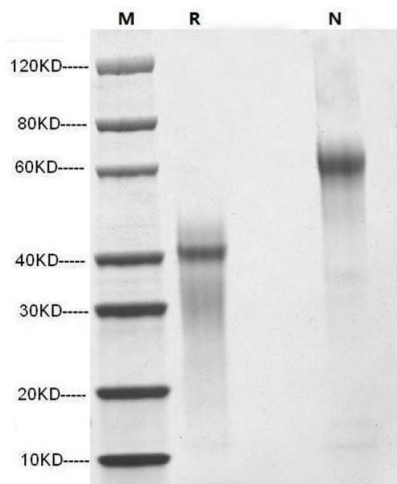


Activity Assay

**Image 1.** IL-12, Human induction of IFN-γ from NK cells co-stimulated with IL-18. The ED<sub>50</sub> for this effect is less than 2ng/mL(1.92 ng/mL).



**Image 2.**



SDS-PAGE

**Image 3.** 2 µg of IL-12, Human was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining.