

Datasheet for ABIN6700021

**IL12 Protein****2** Images[Go to Product page](#)

## Overview

|               |                            |
|---------------|----------------------------|
| Quantity:     | 100 µg                     |
| Target:       | IL12                       |
| Origin:       | Mouse                      |
| Source:       | Escherichia coli (E. coli) |
| Protein Type: | Recombinant                |
| Application:  | SDS-PAGE (SDS)             |

## Product Details

|                              |   |
|------------------------------|---|
| Purpose:                     | Mouse Interleukin-12 Recombinant Protein  |
| Purification:                | Interleukin-12 purity was determined to be greater than 95% as determined by reducing and non-reducing SDS-pAGE.                      |
| Purity:                      | 95,00%  |
| Endotoxin Level:             | Measured by LAL is typically $\leq 1$ EU/µg protein.  |
| Biological Activity Comment: | The activity is determined by the induced expression of CD25 on CD8+ mouse T cells and is typically detectable starting at 0.1 ng/mL. |

## Target Details

|                   |  |
|-------------------|--|
| Target:           | IL12   |
| Alternative Name: | Il12a/Il12b ( <a href="#">IL12 Products</a> )  |
| Background:       | Synonyms: NKSF, CLMF<br>Background: Interleukin-12 (IL-12) is an important mediator of cellular-immunity produced by |

## Target Details

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dendritic cells, macrophages and B cells when stimulated with antigen. IL-12 is involved in differentiating precursor helper T cells to Th1 and/or Th2 subtypes and promotes the production of IFN gamma and TNF alpha. Mouse IL-12 is active on human and mouse cells. Recombinant mouse IL-12 is a glycosylated, disulfide-linked heterodimer. It is containing one p35 su

UniProt: [P43432](#)

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

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Application Notes: Other: User Optimized  
Application\_Note: Interleukin-12 Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Interleukin-12 in immunological assays.

Comment: Suggested\_Applications: Cellular Assay  
Other\_Performance\_Data:

Restrictions: For Research Use only

## Handling

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Format: Lyophilized

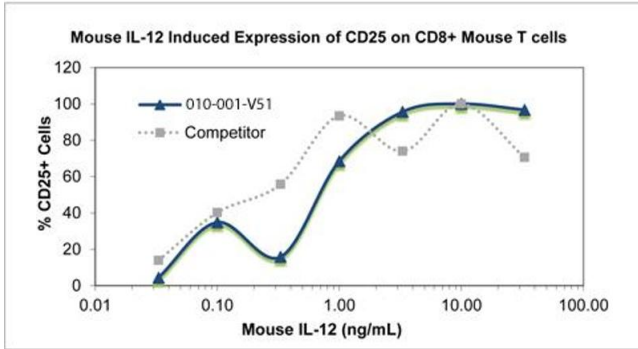
Reconstitution: Reconstitution\_Buffer: Restore with deionized water (or equivalent)  
Reconstitution\_Volume: 100 µL

Buffer: Lyophilized in 10 mM sodium phosphate, 50 mM sodium chloride, pH 7.5.

Preservative: Without preservative

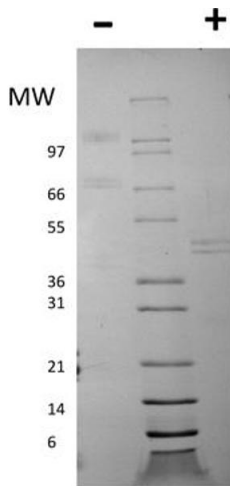
Storage: 4 °C, -20 °C

Storage Comment: Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.



**SDS-PAGE**

**Image 1.** SDS-PAGE of Mouse Interleukin-12 Recombinant Protein Bioactivity of Mouse Interleukin-12 Recombinant Protein. Serial dilutions of Mouse IL-12 (starting at 33 ng/mL) were added to mouse splenic T cells. After 72 hours, cells were stained to analyze surface CD8 and CD25. The linear portion of the curve was used to calculate the ED50. The ED50 of Mouse IL-12 is between 1-1.8 ng/mL. This value is comparable to the typically expected to be less than 2 ng/mL.



**SDS-PAGE**

**Image 2.** SDS-PAGE of Mouse Interleukin-12 Recombinant Protein SDS-PAGE of Mouse Interleukin-12 Recombinant Protein. Lane 1: 1 µg Mouse IL-12 in non-reducing conditions. Lane 2: Molecular weight marker. Lane 3: 1 µg Mouse IL-12 in reducing conditions (+). Mouse IL-12 is a heterodimer comprised of one 40 kDa subunit and one 35 kDa subunit. The total predicted MW is 70 kDa.