

Rat IL12B / IL-12B Protein (His Tag)

Catalog Number: 80352-R08H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

IL12B

Protein Construction:

A DNA sequence encoding the rat IL12B (G3V9Y5) (Met1-Ser335) was expressed with a polyhistidine tag at the C-terminus.

Source: Rat

Expression Host: Human Cells

QC Testing

Purity: (41.7+54.1) % as determined by SDS-PAGE

Bio-Activity

Measured by its binding ability in a functional ELISA.
Immobilized rat IL12B (cat: 80352-R08H) at 10 µg/ml (100 µl/well) can bind biotinylated mouse IL12RB2 (Cat:50099-M08H). The EC₅₀ of biotinylated mouse IL12RB2 (Cat:50099-M08H) is 0.6-1.5 µg/ml.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met 23

Molecular Mass:

The recombinant rat IL12B comprises 324 amino acids and predicts a molecular mass of 37.2 kDa. The apparent molecular mass of the recombinant protein is approximately 47 and 45 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

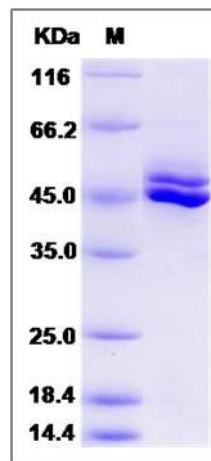
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Interleukin 12 (IL-12), also known as NKSF or CLMF, is a disulfide-linked heterodimeric cytokine composed of a 35kDa subunit P35 and a 40kDa subunit P40, also designated as IL-12A and IL-12B. IL-12 is predominantly produced by macrophages and B lymphocytes and plays an important role in the activities of natural killer cells and T lymphocytes. It is involved in the differentiation and development of Th1 cells, enhancement of natural killer cells' cytolytic function and mitogenic effects, as well as induction of IFN-gamma during which it can synergize with other IFN-gamma inducers. A large excess of monomeric IL-12B is also secreted by the cells producing IL-12, and exhibits no demonstrable biological activity. Overexpression of IL-12B has been shown to be associated with the pathogenesis of multiple sclerosis.

References

1. Ling P. et al., 1995, J Immunol. 154: 116-27.
2. Thierfelder WE. et al., 1996, Nature. 382: 171-4.
3. Kato K. et al., 1996, Proc Natl Acad Sci. 93: 9085-89.
4. Kim JH. et al., 1997, Clin Exp Immunol. 108: 243-50.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>