

Human IL12A / NKSF1 Protein (His Tag)

Catalog Number: 10021-H08H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

IL12A, CLMF, IL-12A, NFSK, NKSF1, P35

Protein Construction:

A DNA sequence encoding the p35 subunit of human IL12, termed as IL12A (P29459) (Met 1-Ser 219) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Bio-Activity

Measured by its ability to bind Human IL12B-his in functional ELISA.

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: Arg 23

Molecular Mass:

The recombinant human IL12A consists of 208 amino acids and has a predicted molecular mass of 24 kDa. As a result of glycosylation, the rhIL12A migrates as an approximately 35-40 kDa band in SDS-PAGE under reducing conditions.

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.

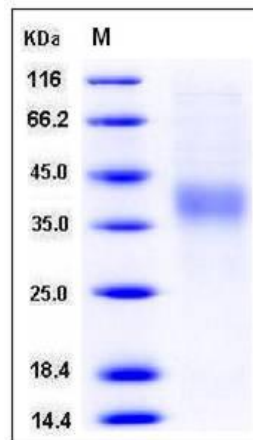
Usage Guide

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 (IL12), also known as natural killer cell stimulatory factor (NKSF) or cytotoxic lymphocyte maturation factor (CLMF), is a 70 kDa disulfide-linked heterodimeric cytokine composed of a 35-kD subunit P35 and a 40-kD subunit P40, also designated as IL12A and IL12B. IL12 is predominantly produced by macrophages and B lymphocytes and plays an important role in the activities of natural killer cells and T lymphocytes. IL12 is involved in the differentiation and development of Th1 cells, enhancement of natural killer cytolytic function and mitogenic effects, as well as induction of IFN-gamma during which it can synergize with other IFN-gamma inducers. The most powerful inducers of IL-12 production are bacteria, bacterial products and parasites. IL12A shows significant sequence similarity to IL-6, G-CSF, and exerts biological activities only when the IL12B is co-expressed. IL12B deficient mice are resistant to the induction of experimental chronic inflammatory diseases whereas IL12A knock-out mice develop more severe forms, suggesting opposite functions of the two subunits in the outcome of chronic inflammatory diseases.

References

1. Sieburth, D. et al., 1992, Genomics. 14: 59-62.
2. Gearing, D.P. et al., 1991, Cell. 66: 9-10.
3. Thierfelder, W.E. et al., 1996, Nature. 382: 171-174.
4. Chehimi, J. et al., 1993, Eur. J. Immunol. 23: 1826-1830.
5. Kim, J.H. et al., 1997, Clin. Exp. Immunol. 108: 243-250.

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>