

Human IL12A & IL12B (IL12A & IL12B Heterodimer) recombinant protein



Catalog Number: 503399

General Information

Gene Name Synonym

Cytotoxic lymphocyte maturation factor 35 kDa subunit; IL-12 subunit p35; NK cell stimulatory factor chain 1

Protein Construction

A DNA sequence encoding the p35 subunit of human IL-12, termed as IL12A (NP_000873.2) (Met 1-Ser 219) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 1 ; A DNA sequence encoding the p40 subunit of human IL-12, termed as IL12B (NP_002178.2) (Met 1-Ser 328) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 2. The two plasmids were co-expressed and the heterodimer was purified.

Organism

Human

Expression Host

Human Cells

QC Testing

Activity

1. Measured by its ability to bind biotinylated recombinant human IL12RB1 in a functional ELISA.
2. Measured in a cell proliferation assay using Anti-CD28 and Anti-CD3-stimulated PBMC. The ED₅₀ for this effect is typically 0.1-0.6 ng/mL.

Purity

> 95 % as determined by SDS-PAGE

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 & Ile 23

Molecular Mass

The recombinant IL12 heterodimer of human IL12A/IL12B comprises 525 (208 + 317) amino acids and has a calculated molecular mass of 60.2 (24 + 36.2) kDa. The apparent molecular mass of rh IL12 heterodimer is approximately 40 & 43 kDa respectively in SDS-PAGE under reducing conditions.

Formulation

Lyophilized from sterile PBS, pH 7.4

1. 5 % trehalose and mannitol are added as protectants before lyophilization.
2. Please contact us for any concerns or special requirements.

Usage Guide

Storage

Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

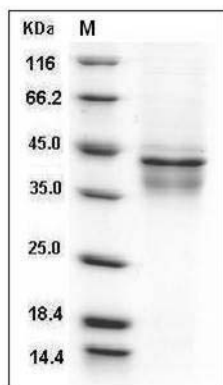
Adding sterile water, prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis.

SDS-PAGE

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Human IL-12 (IL12A & IL12B Heterodimer)
Protein SDS-PAGE