Human IL-12 (IL12A & IL12B Heterodimer) Protein

Catalog Number: CT011-H08H



General Information

Gene Name Synonym:

CLMF; CLMF2; IL-12A; IL-12B; IL12; IL12 p70; IMD28; IMD29; NFSK; NKSF; NKSF1; NKSF2; P35

Protein Construction:

A DNA sequence encoding the p35 subunit of human IL-12, termed as IL12A (P29459.2) (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.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio 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-CD3 antibody activated human peripheral blood mononuclear cell (PBMC). The ED $_{50}$ for this effect is typically 0.1-1 ng/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: Arg 23 & lle 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

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 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.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

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

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

SDS-PAGE:

