Human IL-12 (IL12A & IL12B Heterodimer) Protein

Catalog Number: GMP-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) (Met1-Ser219) 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) (Met1-Ser328) 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. ≥ 95 % as determined by

SEC-HPLC.

Bio Activity:

Measured by its ability to induce Interferon gamma secretion by human natural killer lymphoma NK-92 cells. The ED $_{50}$ for this effect is typically 0.04-0.4 ng/mL. The specific activity of recombinant human IL-12 is >10, 000 Units/ μ g, which is calibrated against the human IL-12 WHO International Standard (NIBSC code: 95/544).

Endotoxin:

< 5 EU per mg of the protein.

Predicted N terminal: Arg 23 & lle 23

Molecular Mass:

The recombinant IL12 heterodimer of human IL12A/IL12B comprises 525 (208 \pm 317) amino acids and has a calculated molecular mass of 60.13 (23.99+36.14) kDa.

Formulation:

Supplied as sterile PBS, pH 7.4

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

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.

SDS-PAGE:



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