



Recombinant Mouse IL-12 (Interleukin-12)

DATA SHEET

Catalog Number: 200-25
Accession Number: P43432/P43431

Specifications and Uses:

Alternate Names: NKSF, CLMF

Description:

Interleukin-12 (IL-12) is an important mediator of cellular-immunity produced by dendritic cells, macrophages and B cells when stimulated with antigen. IL-12 is involved in differentiating precursor helper T cells to Th1 and/or Th2 subtypes and promotes the production of IFN gamma and TNF alpha. Mouse IL-12 is active on human and mouse cells. Recombinant mouse IL-12 is a glycosylated, disulfide-linked heterodimer. It is containing one p35 subunit (35 kDa) and one p40 subunit (40 kDa), with a total of 506 amino acids and a molecular weight of approximately 70 kDa.

Source: HEK 293 cells

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation and Stability:

Recombinant mouse IL-12 is lyophilized from 0.5 x PBS, pH 7.5.

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity (typically ≥ 95%) determined by:

Reducing and Non-reducing SDS-PAGE

Endotoxin Level:

Measured by kinetic LAL analysis and is typically ≤ 1 EU/μg protein.

Biological Activity:

The activity is determined by the induced expression of CD25 on CD8+ mouse T cells and is typically detectable starting at 0.1 ng/mL.

AA Sequence:

p35 Subunit: RVIPVSGPAR CLSQSRNLLK TTDDMVKTAR EKLKHYSCTA EDIDHEDITR DQTSTLKTCL PLELHKNESCLATRETSSTT RGSCLPQKT SLMMTLCLGS IYEDLKMYQT EFQAINAALQ NHHHQIILD KGMLVAIDELMQSLNHNGET LRQKPPVGEA DPYRVKMKLC ILLHAFSTRV VTINRVMGYL SSA

p40 Subunit: MWELEKDYYV VEVDWTPDAP GETVNLCDT PEEDDITWTS DQRHGVIKSG KTLTITVKEF LDAGQYTCHKGGETLSHSHL LLHKKENGW STEILKNFKN KTFKCEAPN YSGRFTCSWL VQRNMDLKFN IKSSSSSPDS RAVTCGMASLSAEKVTLDQR DYEKYSVSCQ EDVTCPTAEE TLPIELALEA RQKNKYENYS TSFFIRDIIK PDPPKNLQMK PLKNSQVEVSWEYPDSWSTP HSYFSLKFFV RIQRKKEKMK ETEEGCNQKG AFLVEKTSTE VQCKGGNVCV QAQDRYNSSCSKWACVPCR VRS

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!