

IL-12

Catalog # PVGS1238

Specification

IL-12 - Product Information

Primary Accession **Species** Human

P29459(p35) & P29460(p40)

Sequence

p35:Arg23-Ser219; p40: Ile23-Ser328

Purity

> 95% as analyzed by SDS-PAGE
br>> 95% as analyzed by HPLC

Endotoxin Level

< 0.2 EU/ μg of protein by gel clotting method

Biological Activity

ED₅₀ < 2.0 ng/ml, measured by the induction of IFN- γ from NK cells, corresponding to a specific activity of > 5.0 × 10⁵ units/mg.

Expression System

HEK 293

Theoretical Molecular Weight

75 kDa

Formulation

Lyophilized after extensive dialysis against PBS.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to $100 \mu g/ml$.

Storage & Stability

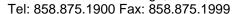
Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

IL-12 - Additional Information

Target Background

Interleukin 12 (IL-12), also known as natural killer cell stimulatory factor (NKSF) or cytotoxic lymphocyte maturation factor (CLMF), is a pleiotropic cytokine originally identified in the medium of activated human B lymphoblastoid cell lines. The p40 subunit of IL-12 has been shown to have extensive amino acid sequence homology to the extracellular domain of the human IL-6 receptor while the p35 subunit shows distant but significant sequence similarity to IL-6, G-CSF, and chicken MGF. These observations have led to the suggestion that IL-12 might have evolved from a







cytokine/soluble receptor complex. Human and mouse IL-12 share 70% and 60% amino acid sequence homology in their p40 and p35 subunits, respectively. IL-12 apparently shows species specificity with human IL-12 reportedly showing minimal activity in the mouse system.

IL-12 - Protein Information

IL-12 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL-12 - Images