

GFM25 Recombinant Mouse IL-12

Description

Interleukin-12 (IL-12) is an inducer of cell-mediated immunity and is produced by dendritic cells, macrophages, and B cells after antigen stimulation. IL-12 functions to promote naive T cell differentiation into the type 1 T helper cell (Th1) lineage. IL-12 also stimulates the production of interferon- γ (IFN- γ) and Tumor Necrosis Factor α (TNF- α) from T cells and Natural Killer cells. Mouse IL-12 is active on human and mouse cells.

Length	p35: 194 aa, p40: 313 aa total: 507 aa
Molecular Weight	p35: 21.8 kDa, p40: 35.8 kDa, total: 57.6 kDa
Source	HEK 293 cells
Accession Number	P43432/P43431
Purity	\geq 95% determined by reducing and non-reducing SDS-PAGE

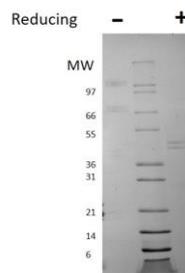
Specifications

Alternative Names	Interleukin-12, interleukin 12, IL12, IL 12, NKSF, CLMF
Biological Activity	Mouse IL-12 is fully biologically active when compared to standard. The activity is determined by the ability to induce expression of CD25 by mouse primary T cells and it is typically less than 20 ng/ml. This corresponds to an expected specific activity of 5×10^4 units/mg.
Endotoxin Level	\leq 1.00 EU/ μ g as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, 50 mM sodium chloride, pH 7.5
AA Sequence	<p>p35:</p> <p>MRVIPVSGPA RCLSQSRNLL KTTDDMVKTA REKLKHYST AEDIDHEDIT RDQTSTLKTC LPLELHKNES CIATRETSST TRGSCLPQK TSLMMTLCLG SIYEDLKMYQ TEFQAINAAL QNHNHQQIIL DKGMLVAIDE LMQSLNHNGE TLRQKPPVGE ADPYRVKMKL CILLHAFSTR VVTINRVMGY LSSA</p> <p>p40:</p> <p>MWELEKDVYV VEVDWTPDAP GETVNL</p>

Preparation and 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 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	<p>12 months from date of receipt when stored at -20°C to -80°C as supplied.</p> <p>1 month when stored at 4°C after reconstituting as directed.</p> <p>3 months when stored at -20°C to -80°C after reconstituting as directed.</p>

Data



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μ g of protein was loaded in each lane. Mouse IL-12 has comprised with one subunit which is predicted Mw of 35.8 kDa and one subunit which has predicted Mw of 21.8 kDa, with total Mw predicted of 57.6 kDa.