



Anti-Human IL-12 p70 (#3M29)

20230310DS



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	101-M782
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse immunized with purified recombinant human IL-12 P70).

Target Background

Synonyms (Target):	CLMF p35; Cytotoxic lymphocyte maturation factor 35 kDa subunit; IL12 p70; IL-12 subunit p35; IL-12A, cytotoxic lymphocytematuration factor 1, p35; interleukin-12 alpha chain; interleukin-12 subunit alpha; natural killer cell stimulatory factor 1, 35 kD
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Interleukin 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 murine 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 murine system. IL-12 is produced by macrophages and B lymphocytes and has been shown to have multiple effects on T cells and natural killer (NK) cells. These effects include inducing production of IFN-gamma and TNF by resting and activated T and NK cells, synergizing with other IFN-gamma inducers at both the transcriptional and post-transcriptional levels. This interaction induces IFN-gamma gene expression, enhancing the cytotoxic activity of resting NK and T cells, inducing and synergizing with IL-2 in the generation of lymphokine-activated killer (LAK) cells, acting as a co-mitogen to stimulate proliferation of resting T cells, and inducing proliferation of activated T and NK cells. Current evidence indicates that IL-12, produced by macrophages in response to infectious agents, is a central mediator of the cell-mediated immune response by its actions on the development, proliferation, and activities of TH1 cells. In its role as the initiator of cell-mediated immunity, it has been suggested that IL-12 has therapeutic potential as a stimulator of cell-mediated immune responses to microbial pathogens, metastatic cancers, and viral infections such as AIDS.

Database References Target

Protein RefSeq:	AAA59937.1
Uniprot ID:	P29459
mRNA RefSeq:	M65291.1

Product Specifications

Host	Mouse
Reactivity against	Human
Clonality	Monoclonal Antibody
Clone	(#3M29)
Isotype	IgG1
Purification	Protein G chromatography
Antigen	Recombinant Human IL-12 p70
Formulation	lyophilized
Reconstitution buffer	PBS

Application/Handling

Reconstitution: Centrifuge vial prior to opening. Reconstitute the antibody with 500 µl sterile PBS and the final concentration is 200 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20°C for at least for six months without detectable loss of activity.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

The antibody can be used within the following applications:

ICC, Capture Ab

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!