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Rabbit Anti-IL12 p40 antibody

SL19133R

Product Name:	IL12 p40
Chinese Name:	白细胞介素12p40抗体
Alias:	CLMF; CLMF p40; CLMF2; Cytotoxic lymphocyte maturation factor 40 kDa subunit; IL 12 subunit p40; IL 12B; IL-12 subunit p40; IL-12B; IL12 subunit p40; IL12B; IL12B_HUMAN; interleukin 12 beta chain; Interleukin 12 p40; Interleukin 12 subunit beta; Interleukin 12B; Interleukin-12 subunit beta; natural killer cell stimulatory factor 40 kD subunit; NK cell stimulatory factor chain 2; NKSF; NKSF2; p40.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	46kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IL12 p40:201-300/328
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a subunit of interleukin 12, a cytokine that acts on T and natural killer cells, and has a broad array of biological activities. Interleukin 12 is a disulfide-linked heterodimer composed of the 40 kD cytokine receptor like subunit encoded by this gene, and a 35 kD subunit encoded by IL12A. This cytokine is expressed by

activated macrophages that serve as an essential inducer of Th1 cells development. This cytokine has been found to be important for sustaining a sufficient number of memory/effector Th1 cells to mediate long-term protection to an intracellular pathogen. Overexpression of this gene was observed in the central nervous system of patients with multiple sclerosis (MS), suggesting a role of this cytokine in the pathogenesis of the disease. The promoter polymorphism of this gene has been reported to be associated with the severity of atopic and non-atopic asthma in children. [provided by RefSeq, Jul 2008]

Function:
Cytokine that can act as a growth factor for activated T and NK cells, enhance the lytic activity of NK/lymphokine-activated killer cells, and stimulate the production of IFN-gamma by resting PBMC.
Associates with IL23A to form the IL-23 interleukin, an heterodimeric cytokine which functions in innate and adaptive immunity. IL-23 may constitute with IL-17 an acute response to infection in peripheral tissues. IL-23 binds to an heterodimeric receptor complex composed of IL12RB1 and IL23R, activates the Jak-Stat signaling cascade, stimulates memory rather than naive T-cells and promotes production of proinflammatory cytokines. IL-23 induces autoimmune inflammation and thus may be responsible for autoimmune inflammatory diseases and may be important for tumorigenesis.

Subcellular Location:
Secreted.

Post-translational modifications:
Known to be C-mannosylated in the recombinant protein; it is not yet known for sure if the wild-type protein is also modified.

DISEASE:
Defects in IL12B are a cause of mendelian susceptibility to mycobacterial disease (MSMD) [MIM:209950]; also known as familial disseminated atypical mycobacterial infection. This rare condition confers predisposition to illness caused by moderately virulent mycobacterial species, such as Bacillus Calmette-Guerin (BCG) vaccine and environmental non-tuberculous mycobacteria, and by the more virulent Mycobacterium tuberculosis. Other microorganisms rarely cause severe clinical disease in individuals with susceptibility to mycobacterial infections, with the exception of Salmonella which infects less than 50% of these individuals. The pathogenic mechanism underlying MSMD is the impairment of interferon-gamma mediated immunity, whose severity determines the clinical outcome. Some patients die of overwhelming mycobacterial disease with lepromatous-like lesions in early childhood, whereas others develop, later in life, disseminated but curable infections with tuberculoid granulomas. MSMD is a genetically heterogeneous disease with autosomal recessive, autosomal dominant or X-linked inheritance.
Genetic variations in IL12B are a cause of susceptibility to psoriasis type 11 (PSORS11) [MIM:612599]. Psoriasis is a common, chronic inflammatory disease of

	the skin with multifactorial etiology. It is characterized by red, scaly plaques usually found on the scalp, elbows and knees. These lesions are caused by abnormal keratinocyte proliferation and infiltration of inflammatory cells into the dermis and epidermis. **Similarity:** Belongs to the type I cytokine receptor family. Type 3 subfamily. Contains 1 fibronectin type-III domain. Contains 1 Ig-like C2-type (immunoglobulin-like) domain. **SWISS:** P29460 **Gene ID:** 3593 **Database links:** Entrez Gene: 3593 Human Entrez Gene: 16160 Mouse Entrez Gene: 64546 Rat Omim: 161561 Human SwissProt: P29460 Human SwissProt: P43432 Mouse Unigene: 674 Human Unigene: 239707 Mouse Unigene: 48686 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.