IL12B Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	IL12B, Polyclonal Antibody
Full Product Name	Rabbit polyclonal IL12B antibody (HRP)
Product Gene Name	anti-IL12B antibody
Product Synonym Names	IL12B antibody (HRP)
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Form/Format	Supplied with 0.03% Proclin 300, 50% Glycerol and 0.01M PBS, PH 7.4
Purity/Purification	Purified by Ammonium Sulfate precipitation
Preparation and Storage	Store at 4 degree C for short term storage and -20 degree C for long term storage. Avoid repeat freeze/thaw cycles.
Molecular Weight	37,169 Da
OMIM	M65272 mRNA
3D Structure	ModBase 3D Structure for P29460
Immunogen	IL12B antibody (HRP) was raised in Rabbit using recombinant human Interleukin-12 subunit beta protein as the immunogen
Cross-Reactivity	Human
Conjugate	HRP
Product Categories/Family for anti-IL12B antibody	Cytokines & Growth Factors
Applications Tested/Suitable for anti-IL12B antibody	ELISA (EIA), Immunohistochemistry (IHC), Western Blot (WB)
Related Product Information for anti-IL12B antibody	MBS5306456 is an antibody targeting IL12B. Also known as Rabbit polyclonal IL12B antibody (HRP). Host: Rabbit.
Other Notes	Small volumes of anti-IL12B antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for IL12B. It may not necessarily be applicable to this product.

NCBI GI #	24497438
NCBI GeneID	3593
NCBI Accession #	NP_002178.2
UniProt Primary Accession #	P29460
UniProt Related Accession #	P29460

GenBank Nucleotide #	NM_002187.2
NCBI Official Full Name	interleukin-12 subunit beta
NCBI Official Synonym Full Names	interleukin 12B
NCBI Official Symbol	IL12B
NCBI Official Synonym Symbols	CLMF; NKSF; CLMF2; IMD28; IMD29; NKSF2; IL-12B
UniProt Protein Name	Interleukin-12 subunit beta
UniProt Synonym Protein Names	Cytotoxic lymphocyte maturation factor 40 kDa subunit; CLMF p40; IL-12 subunit p40; NK cell stimulatory factor chain 2; NKSF2
Protein Family	Interleukin
UniProt Gene Name	IL12B
UniProt Synonym Gene Names	NKSF2; IL-12B; CLMF p40; NKSF2
NCBI Protein Information	interleukin-12 subunit beta
NCBI Summary for IL12B	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]

UniProt Comments for IL12B	IL12B: 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. Defects in IL12B are a cause of mendelian susceptibility to mycobacterial disease (MSMD); 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). 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. Belongs to the type I cytokine receptor family. Type 3 subfamily. Protein type: Cytokine; Secreted; Secreted, signal peptide Chromosomal Location of Human Ortholog: 5q33.3 Cellular Component: extracellular region; extracellular space; interleukin-12 complex Molecular Function: cytokine activity; growth factor activity; identical protein binding; interleukin-12 alpha subunit binding; interleukin-12 receptor binding; interleukin-23 receptor binding; protein binding; protein heterodimerization activity Biological Process: cell cycle arrest; cell migration; defense response to Gram-negative bacterium; interferon-gamma biosynthetic process; natural killer cell activation; negative regulation of interleukin-10 production; negative regulation of interleukin-17 production; negative regulation of smooth muscle cell proliferation; positive regulation of activated T cell proliferation; positive regulation of cell adhesion; positive regulation of defense response to virus by host; positive regulation of granulocyte macrophage colony-stimulating factor production; positive regulation of inflammatory response; positive regulation of interferon-gamma biosynthetic process; positive regulation of interferon-gamma production; positive regulation of interleukin-10 production; positive regulation of interleukin-12 production; positive regulation of interleukin-17 production; positive regulation of lymphocyte proliferation; positive regulation of memory T cell differentiation; positive regulation of mononuclear cell proliferation; positive regulation of natural killer cell activation; positive regulation of natural killer cell mediated cytotoxicity directed against tumor cell target; positive regulation of natural killer cell proliferation; positive regulation of NF-kappaB import into nucleus; positive regulation of NK T cell activation; positive regulation of NK T cell proliferation; positive regulation of osteoclast differentiation; positive regulation of T cell mediated cytotoxicity; positive regulation of T cell proliferation; positive regulation of T-helper 1 type immune response; positive regulation of tissue remodeling; positive regulation of tumor necrosis factor production; positive regulation of tyrosine phosphorylation of Stat3 protein; positive regulation of tyrosine phosphorylation of Stat4 protein; positive regulation of tyrosine phosphorylation of Stat5 protein; regulation of cytokine biosynthetic process; regulation of tyrosine phosphorylation of Stat1 protein; response to UV-B; sexual reproduction; T-helper 1 type immune response; T-helper cell differentiation Disease: Immunodeficiency 29
Research Articles on IL12B	**1.** Findings indicate that IL-12p40 + 1188A/C polymorphism as well as IL-12p70 protein levels may be associated with rheumatoid arthritis (RA) in the Polish population.
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