Product Name: **IL-12Rβ1 Rabbit Polyclonal Antibody**
Catalog #: **APRab12496**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight	73kDa

Antigen Information

Gene Name	IL12RB1
Alternative Names	IL12RB1; IL12R; IL12RB; Interleukin-12 receptor subunit beta-1; IL-12 receptor subunit beta-1; IL-12R subunit beta-1; IL-12R-beta-1; IL-12RB1; IL-12 receptor beta component; CD212
Gene ID	3594.0
SwissProt ID	P42701
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human IL12RB1. AA range:211-260

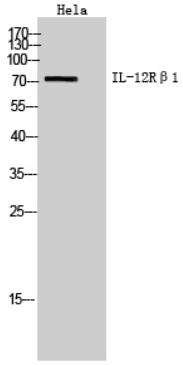
Background

interleukin 12 receptor subunit beta 1(IL12RB1) Homo sapiens The protein encoded by this gene is a type I transmembrane protein that belongs to the hemopoietin receptor superfamily. This protein binds to interleukine 12 (IL12) with a low affinity, and is thought to be a part of IL12 receptor complex. This protein forms a disulfide-linked oligomer, which is required for its IL12 binding activity. The coexpression of this and IL12RB2 proteins was shown to lead to the formation of high-affinity IL12 binding sites and reconstitution of IL12 dependent signaling. Mutations in this gene impair the development of interleukin-17-producing T lymphocytes and result in increased susceptibility to mycobacterial and Salmonella infections. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014],disease:Defects in IL12RB1 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.,domain:The box 1 motif is required for JAK interaction and/or activation.,domain:The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding.,function:Functions as an interleukin receptor which binds interleukin-12 with low affinity and is involved in IL12 transduction. Associated with IL12RB2 it forms a functional, high affinity receptor for IL12. Associates also with IL23R to form the interleukin-23 receptor which functions in IL23 signal transduction probably through activation of the Jak-Stat signaling cascade.,online information:IL12RB1 mutation db,similarity:Belongs to the type I cytokine receptor family. Type 2 subfamily.,similarity:Contains 5 fibronectin type-III domains.,subunit:Dimer or oligomer; disulfide-linked. Interacts with IL12RB2 to form the high affinity IL12 receptor. Heterodimer with IL23R; in presence of IL23. The heterodimer forms the IL23 receptor.,

Research Area

Cytokine-cytokine receptor interaction;Jak_STAT;

Image Data



Western Blot analysis of Hela cells using IL-12Rβ1 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000