

**IL-12R $\beta$ 1 Polyclonal Antibody**

<b>Catalog No :</b>	YT5614
<b>Reactivity :</b>	Human;Rat;Mouse;
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	IL-12R $\beta$ 1
<b>Fields :</b>	>>Cytokine-cytokine receptor interaction;>>JAK-STAT signaling pathway;>>Th1 and Th2 cell differentiation;>>Th17 cell differentiation;>>Pathways in cancer;>>Inflammatory bowel disease
<b>Gene Name :</b>	IL12RB1
<b>Protein Name :</b>	Interleukin-12 receptor subunit beta-1
<b>Human Gene Id :</b>	3594
<b>Human Swiss Prot No :</b>	P42701
<b>Mouse Swiss Prot No :</b>	Q60837
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from the Internal region of human IL12RB1. AA range:211-260
<b>Specificity :</b>	IL-12R $\beta$ 1 Polyclonal Antibody detects endogenous levels of IL-12R $\beta$ 1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 73kD

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**Cell Pathway :** Cytokine-cytokine receptor interaction;Jak\_STAT;

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**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],

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**Function :**

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, where

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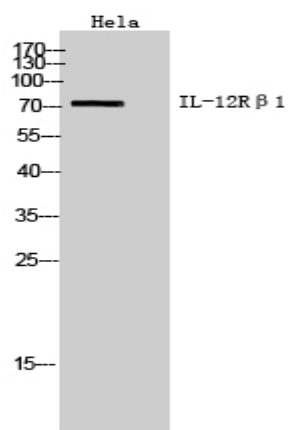
**Subcellular Location :** Membrane; Single-pass type I membrane protein.

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**Expression :** Colon,Umbilical cord blood,

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## Products Images



Western Blot analysis of HeLa cells using IL-12R $\beta$ 1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000