

IL-4Ra (phospho Tyr497) Polyclonal Antibody

Catalog No: YP0560

Reactivity: Human; Mouse

Applications: WB;IHC;IF;ELISA

Target: IL-4R/CD124

Fields: >>Cytokine-cytokine receptor interaction;>>PI3K-Akt signaling pathway;>>JAK-

STAT signaling pathway;>>Hematopoietic cell lineage;>>Th1 and Th2 cell differentiation;>>Th17 cell differentiation;>>Pathways in cancer;>>Inflammatory

bowel disease

Gene Name: IL4R

Protein Name: Interleukin-4 receptor subunit alpha

P24394

P16382

Human Gene Id: 3566

Human Swiss Prot

No:

Mouse Gene Id: 16190

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

IL-4R/CD124 around the phosphorylation site of Tyr497. AA range:463-512

Specificity: Phospho-IL-4Ra (Y497) Polyclonal Antibody detects endogenous levels of

IL-4Ra protein only when phosphorylated at Y497.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not

yet tested in other applications.



Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 90kD

Cell Pathway: Cytokine-cytokine receptor interaction; Jak_STAT; Hematopoietic cell lineage;

Background: This gene encodes the alpha chain of the interleukin-4 receptor, a type I

transmembrane protein that can bind interleukin 4 and interleukin 13 to regulate IgE production. The encoded protein also can bind interleukin 4 to promote differentiation of Th2 cells. A soluble form of the encoded protein can be produced by proteolysis of the membrane-bound protein, and this soluble form can inhibit IL4-mediated cell proliferation and IL5 upregulation by T-cells. Allelic variations in this gene have been associated with atopy, a condition that can manifest itself as allergic rhinitis, sinusitus, asthma, or eczema. Polymorphisms in this gene are also associated with resistance to human immunodeficiency virus type-1 infection. Alternate splicing results in multiple transcript variants. [provided

by RefSeq, Apr 2012],

Function: domain: Contains 1 copy of a cytoplasmic motif that is referred to as the

immunoreceptor tyrosine-based inhibitor motif (ITIM). This motif is involved in modulation of cellular responses. The phosphorylated ITIM motif can bind the SH2 domain of several SH2-containing phosphatases.,domain:The box 1 motif is required for JAK interaction and/or activation.,domain:The extracellular domain represents the IL4 binding protein (IL4BP).,domain:The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding.,function:Receptor for both interleukin 4 and interleukin 13. Couples to the JAK1/2/3-STAT6 pathway. The IL4 response is involved in promoting Th2 differentiation. The IL4/IL13 responses are involved in regulating IgE production and, chemokine and mucus production at sites of

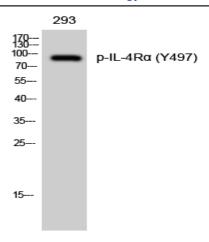
allergic inflammmation. In certain cel

Subcellular Location:

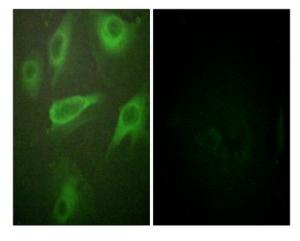
Cell membrane; Single-pass type I membrane protein.; [Isoform 2]: Secreted.

Expression: Isoform 1 and isoform 2 are highly expressed in activated T-cells.

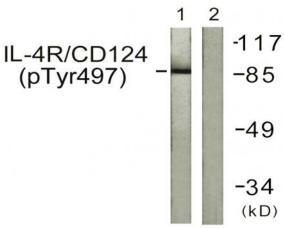
Products Images



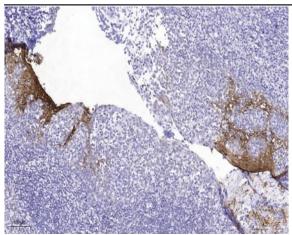
Western Blot analysis of 293 cells using Phospho-IL-4Ra (Y497) Polyclonal Antibody



Immunofluorescence analysis of HeLa cells, using IL-4R/CD124 (Phospho-Tyr497) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells, using IL-4R/CD124 (Phospho-Tyr497) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Tris-EDTA,pH9.0 was used for antigen retrieval. 2 Antibody was diluted at 1:200(4° overnight.3,Secondary antibody was diluted at 1:200(room temperature, 45min).

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