



IL-4R α (phospho Tyr497) Polyclonal Antibody

Catalog No	YP-Ab-13028
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	IL4R
Protein Name	Interleukin-4 receptor subunit alpha
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-4R α (Y497) Polyclonal Antibody detects endogenous levels of IL-4R α 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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	IL4R; IL4RA; 582J2.1; Interleukin-4 receptor subunit alpha; IL-4 receptor subunit alpha; IL-4R subunit alpha; IL-4R-alpha; IL-4RA; CD antigen CD124
Observed Band	90kD
Cell Pathway	Cell membrane; Single-pass type I membrane protein.; [Isoform 2]: Secreted.
Tissue Specificity	Isoform 1 and isoform 2 are highly expressed in activated T-cells.
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 inflammation. In certain cel

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, sinusitis, 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],

matters needing attention

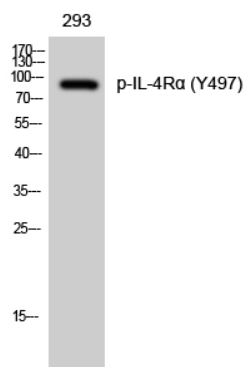
Avoid repeated freezing and thawing!

Usage suggestions

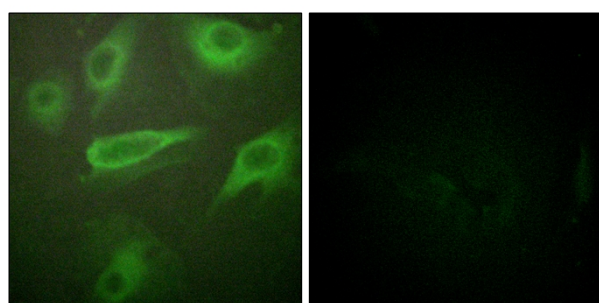
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



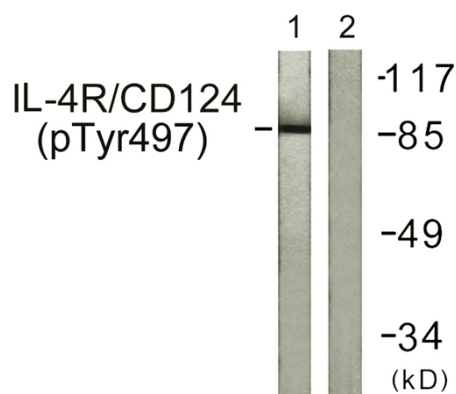
Products Images



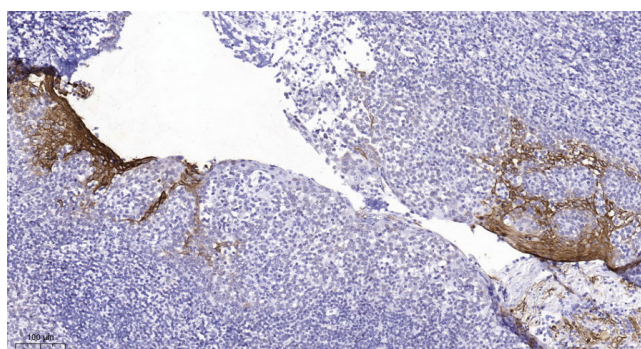
Western Blot analysis of 293 cells using
Phospho-IL-4Rα (Y497) Polyclonal Antibody



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).