IL-4Rα (Phospho Tyr497) Rabbit pAb

CatalogNo: YP0560

Key Features

Host Species	Reactivity	Applications
• Rabbit	• Human,Mouse	• WB,IHC,IF,ELISA

MW	Isotype
• 90kD (Observed)	• IgG

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-1:2000
IHC 1:100-1:300
IF 1:200-1:1000
ELISA 1:5000
Not yet tested in other applications.

Basic Information

Clonality	Polyclonal

Immunogen Information

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-4Rα (Y497) Polyclonal Antibody detects endogenous levels of IL-4Rα protein only when phosphorylated at Y497.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):PAyRS

Target Information

Gene name	IL4R
Protein Name	Interleukin-4 receptor subunit alpha

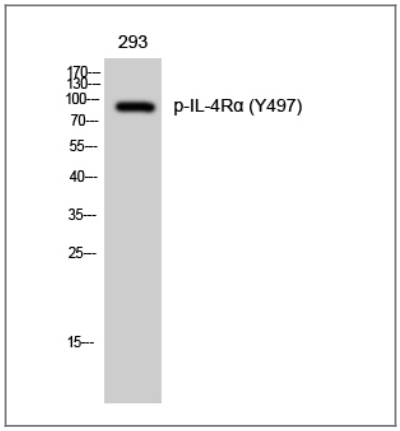
Organism	Gene ID	UniProt ID
Human	3566;	P24394;
Mouse	16190;	P16382;

Cellular Localization	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.

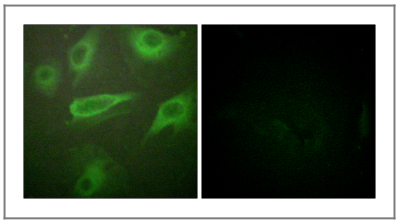
Function

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 inflammmation. In certain cell types , can signal through activation of insulin receptor substrates , IRS1/IRS2. ,Function:Soluble IL4R (sIL4R) inhibits IL4-mediated cell proliferation and IL5 up-regulation by T-cells. ,online information:The Singapore human mutation and polymorphism database ,polymorphism:Allelic variants in IL4RA are associated with a susceptibility to atopy , an immunological condition that can lead to clinical symptoms such as allergic rhinitis , sinusitis , asthma and eczema. ,PTM:On IL4 binding , phosphorylated on C-terminal tyrosine residues. Phosphorylation on any one of tyrosine residues , Tyr-575 , Tyr-603 or Tyr-631 , is required for STAT6-induced gene induction. ,PTM:The soluble form (sIL4R/IL4BP) can also be produced by proteolytic cleavage at the cell surface (shedding) by a metalloproteinase. ,similarity:Belongs to the type I cytokine receptor family. Type 4 subfamily. ,similarity:Contains 1 fibronectin type-III domain. ,subunit:The functional IL4 receptor is formed by initial binding of IL4 to IL4R. Subsequent recruitment to the complex of the common gamma chain , in immune cells , creates a type I receptor and , in non-immune cells , of IL13RA1 forms a type II receptor. IL4R can also interact with the IL13/IL13RA1 complex to form a similar type II receptor. Interacts with PIK3C3 (By similarity) . Interacts with the SH2-containing phosphatases , PTPN6/SHIP1 , PTPN11/SHIP2 and INPP5D/SHIP (By similarity) . Interacts with JAK1 through a Box 1-containing region. In Th1 cells , binds the N-terminal 50 amino acids of SOCS5 , which inhibits JAK1 interaction , STAT6 activation and Th2 cell differentiation. SOCS5 interaction is independent of tyrosine phosphorylation. ,tissue specificity:Both isoform 1 and isoform 2 are highly expressed in activated T-cells. ,

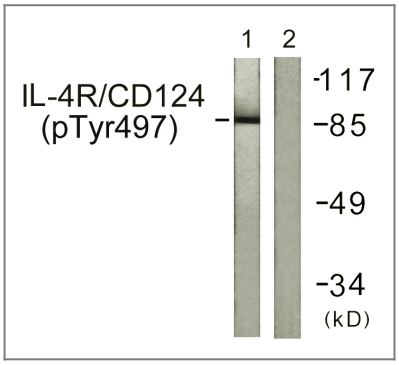
Validation Data



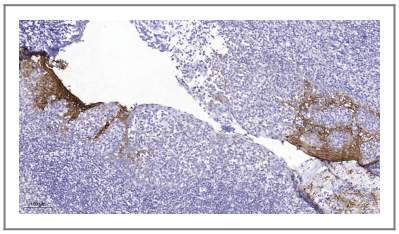
Western Blot analysis of 293 cells using Phospho-IL-4Rα (Y497) Polyclonal Antibody



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).

Contact information

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Please scan the QR code to access additional product information:
IL-4Rα (Phospho Tyr497) Rabbit pAb

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