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IL-4R Rabbit pAb

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Catalog # AP94140

Product Information

Application	WB
Primary Accession	Q63257
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	86719
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from rat IL-4R
Epitope Specificity	111-210/801
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane; Single-pass type I membrane protein. Isoform 2: Secreted.
SIMILARITY	Belongs to the type I cytokine receptor family. Type 4 subfamily.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; inhibited by SOCS5. Interacts with SOCS5; inhibits IL4 signaling.
Post-translational modifications	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.The soluble form (sIL4R/IL4BP) can also be produced by proteolytic cleavage at the cell surface (shedding) by a metalloproteinase.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes the alpha chain of the interleukin-4 receptor, a type I transmembrane protein that can bind interleukin4 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 an alternate splice variant or 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. Two transcript variants encoding different isoforms, a membrane-bound and a soluble form, have been found for this gene. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	25084
Other Names	Interleukin-4 receptor subunit alpha, IL-4 receptor subunit alpha, IL-4R subunit alpha, IL-4R-alpha, IL-4RA, CD124, Il4r, Il4ra
Target/Specificity	Isoform 1 and isoform 2 are highly expressed in activated T-cells.
Dilution	WB=1:500-2000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Il4r
Synonyms	Il4ra
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 cell types, can signal through activation of insulin receptor substrates, IRS1/IRS2 (By similarity).
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	Isoform 2 is expressed in kidney, spleen, lung and liver

Background

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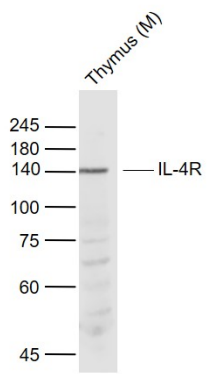
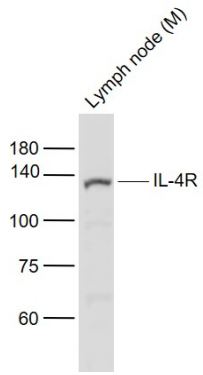
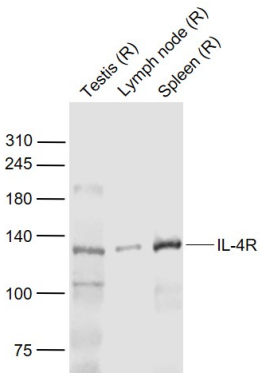
Images



Sample: Lane 1: Thymus (Mouse) Lysate at 40 ug Primary: Anti- IL-4R (AP94140) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 140 kD Observed band size: 140 kD



Sample: Lane 1: Lymph node (Mouse) Lysate at 40 ug Primary: Anti- IL-4R (AP94140) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 140 kD Observed band size: 135 kD



Sample: Lane 1: Testis (Rat) Lysate at 40 ug Lane 2: Lymph node (Rat) Lysate at 40 ug Lane 3: Spleen (Rat) Lysate at 40 ug Primary: Anti- IL-4R (AP94140) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 140 kD Observed band size: 135 kD