


Product datasheet

Anti-IL-4R (phospho Y497) antibody ab61099

1 References 2 Images

Overview

Product name	Anti-IL-4R (phospho Y497) antibody
Description	Rabbit polyclonal to IL-4R (phospho Y497)
Host species	Rabbit
Specificity	Detects endogenous levels of IL4R only when phosphorylated at tyrosine 497 (corresponding to mouse tyrosine 500)
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse 
Immunogen	Synthetic peptide corresponding to Human IL-4R.
Positive control	293 and HeLa cells
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride
Purity	Immunogen affinity purified
Purification notes	Purified from rabbit antiserum by affinity chromatography, using epitope specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
Clonality	Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab61099 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/1000. Detects a band of approximately 89 kDa (predicted molecular weight: 89 kDa).
ICC/IF		1/500 - 1/1000.

Target

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.

Soluble IL4R (sIL4R) inhibits IL4-mediated cell proliferation and IL5 up-regulation by T-cells.

Tissue specificity

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

Sequence similarities

Belongs to the type I cytokine receptor family. Type 4 subfamily.

Contains 1 fibronectin type-III domain.

Domain

The extracellular domain represents the IL4 binding protein (IL4BP).

The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding.

The box 1 motif is required for JAK interaction and/or activation.

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.

Post-translational modifications

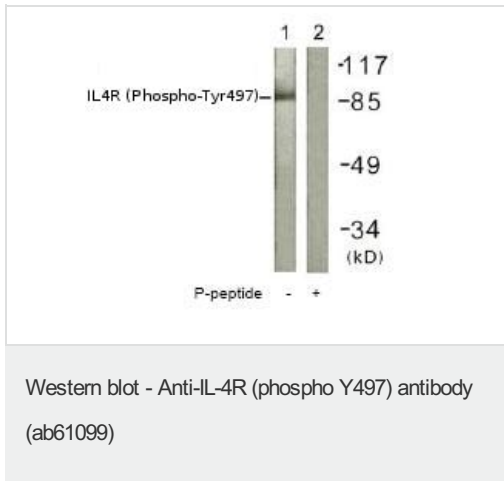
On IL4 binding, phosphorylated on C-terminal tyrosine residues. Phosphorylation on any one of tyrosine residues, Tyr-575, Tyr-603 or Tyr-631, is required for STAT6-induced gene induction.

The soluble form (sIL4R/IL4BP) can also be produced by proteolytic cleavage at the cell surface (shedding) by a metalloproteinase.

Cellular localization

Secreted and Cell membrane.

Images



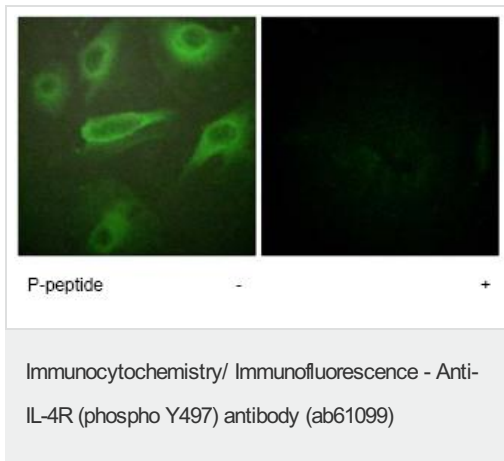
All lanes : Anti-IL-4R (phospho Y497) antibody (ab61099) at 1/500 dilution

Lane 1 : Extracts from 293 cells

Lane 2 : Extracts from 293 cells with immunizing phosphopeptide

Predicted band size: 89 kDa

Observed band size: 89 kDa



ICC/IF image of ab61099 (at a 1/500 dilution) stained HeLa cells, minus immunising peptide (left image) and plus immunising peptide (right image).

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